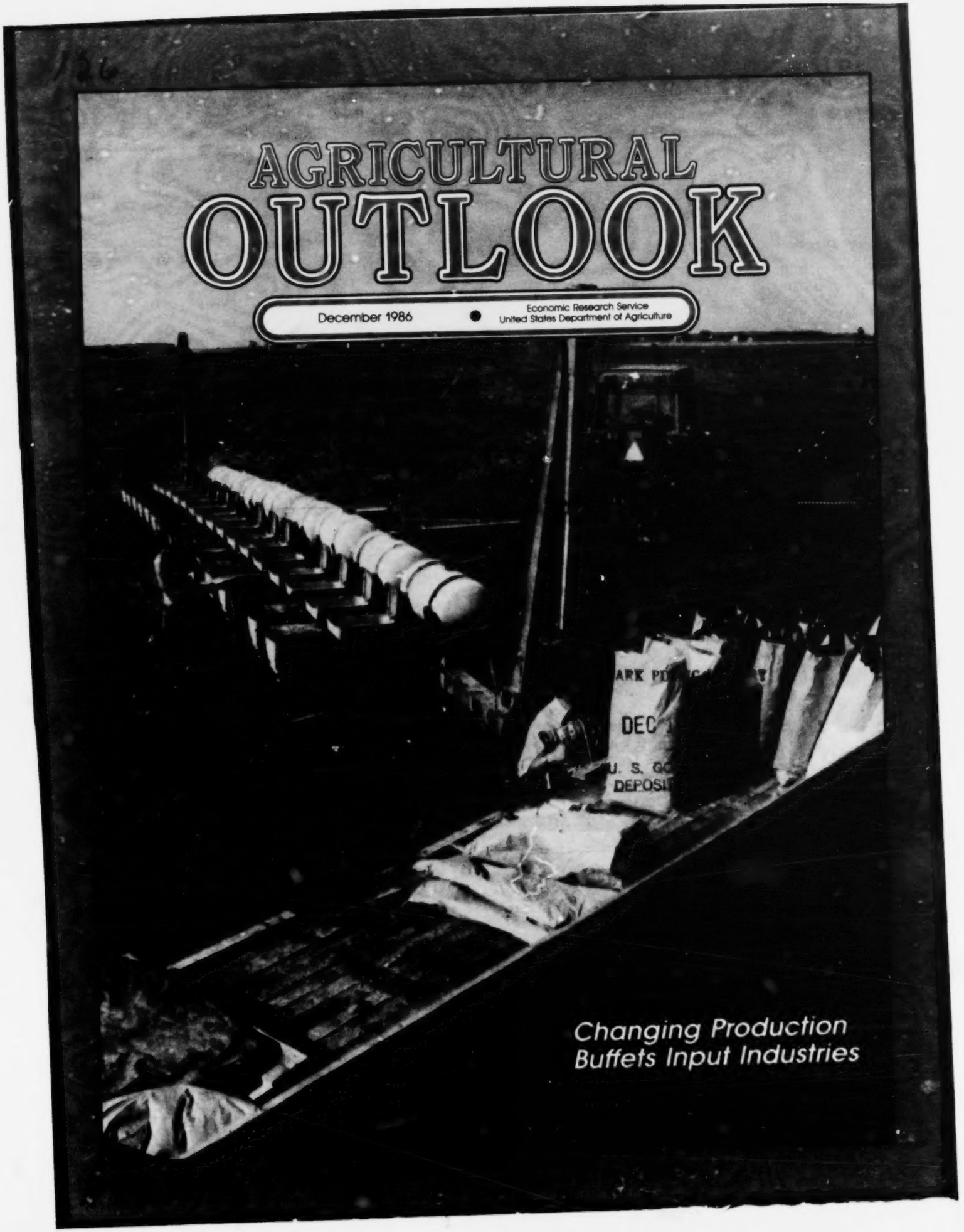
AGRICULTURAL OUTLOOK

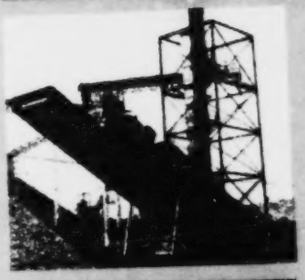
December 1986 ● Economic Research Service
United States Department of Agriculture

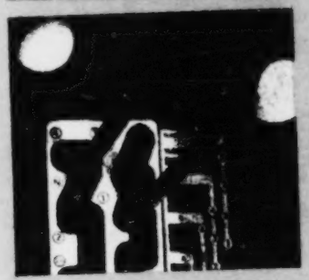


Changing Production Buffets Input Industries

AGRICULTURAL OUTLOOK

December 1986/AO-126





Departments

2 Agricultural Economy
10 Commodity Spotlight: Marketing Loans
14 Farm Finance

Special Articles

22 The Roller Coaster Ride of the Input Industries, 1975-1985
26 How Altering Farm Production Levels Affects GNP and Employment

Statistical Indicators

32 Summary Data
33 U.S. and Foreign Economic Data
34 Farm Prices
35 Producer and Consumer Prices
37 Farm-Retail Price Spreads
40 Livestock and Products
43 Crops and Products
47 World Agriculture
48 U.S. Agricultural Trade
51 Farm Income
54 Transportation
54 Indicators of Farm Productivity and Input Use
55 Food Supply and Use

Economics Editor—Terry Townsend (202) 786-3313
Associate Economics Editor—Herb Moses (202) 786-3313
Managing Editor—Patricia F. Singer (202) 786-1494
Editorial Staff—Shirley Hammond, Eric Sorensen
Statistical Coordinator—Ann Duncan (202) 786-3313
Design Coordinator—Carolyn Riley
Design Staff—Susan Yanero, Michael Hunter
Production Staff—Brenda Powell, Joyce Bailey

For more information, contact:
Commodity Highlights—Terry Townsend (202) 786-3313
Farm Income—Greg Hanson and Gary Lucier (202) 786-1807
Food Prices—Ralph Parlett (202) 786-1870
General Economy—Ralph Monaco (202) 786-1283
Marketing Costs—Denis Dunham (202) 786-1870
Transportation—T. Q. Hutchinson (202) 786-1874
World Agriculture and Trade—Gerald Rector (202) 786-1691, Tom Warden, (202) 786-1621, and Steve MacDonald (202) 786-1621

Contents of this report have been approved by the World Agricultural Outlook Board, and the summary was released November 18, 1986. Materials may be reprinted without permission. *Agricultural Outlook* is published monthly, except for the January/February combined issue. Price and quantity forecasts for crops are based on the November 10 World Agricultural Supply and Demand Estimates.

Annual subscriptions: $26 U.S., $32.50 foreign. Order from ERS Publications, 1301 New York Ave., NW, Room 228, Washington, D.C. 20005-4789. Make check payable to ERS Publications. You will receive a copy of the current issue and acknowledgement of your subscription order. For further information, call (202) 786-1494. Subscriptions also available from the Government Printing Office; for information, call the GPO order desk at (202) 783-3238.

The next issue of *Agricultural Outlook* (AO-127) is scheduled for mailing on January 8, 1987. If you do not receive AO-127 by January 22, call the managing editor at (202) 786-1494 (be sure to have your mailing label handy). The full text and tables of AO-127 will also be available electronically; additional information on this is available at (202) 447-5163.

In Brief . . . News of Marketing Loans, Income by Farm Type

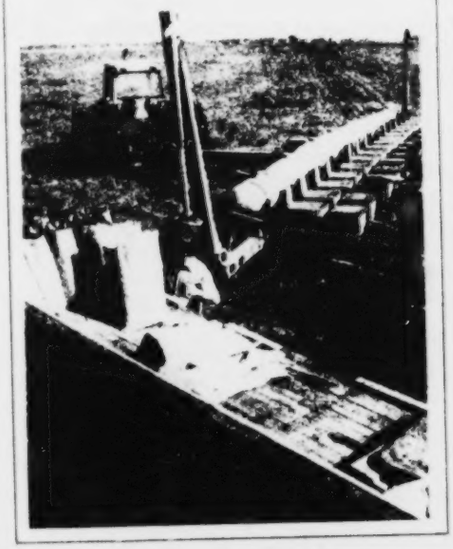
Increased slaughter of female stock in the cattle and hog sectors since 1982 has helped hold up red meat supplies, despite declines in animal numbers. However, stronger livestock prices and lower production costs have resulted in improved net returns to livestock producers in 1986. Consequently, red meat supplies are likely to decline further in 1987 as cattle and hog numbers start to stabilize. Total per capita red meat and poultry supplies are expected to be nearly record large in 1986. Per capita consumption from 1970 through 1985 averaged 204 pounds. It peaked in 1985 at nearly 215 pounds and may be slightly lower this year.

Foreign production of all major crops except cotton is again rising in 1986/87. However, U.S. production is lower because of greater participation in Government commodity programs with increased acreage reduction requirements. Total U.S. production of the major field crops this season is forecast to be down 8 percent from near-record-highs a year ago.

As of November 1, U.S. citrus fruit production for 1986/87 was forecast at 12.4 million tons (excluding California's grapefruit outside of the desert areas). This is 14 percent above 1985/86, despite reduced acreage. All citrus crops are forecast higher, primarily because of favorable weather.

Fresh-market vegetable acreage for 1986 is expected to be 2 percent below the 772,000 harvested last year. However, supplies of fresh vegetables are keeping pace with a year earlier and holding the lid on grower prices so far in 1986.

World centrifugal sugar production for 1986/87 is forecast at 100.1 million metric tons, raw basis, up 2 percent from 1985/86's estimated 98.1 million. Cane sugar production is forecast to rise 4 percent and beet sugar production to drop 2 percent.



Net cash income for crop farms is expected to be down in 1986, going from 1985's average $27,000 per farm to about $25,000. Government payments to crop farms will rise more than 50 percent, cushioning this year's drop in commodity prices. Lower expenses should save crop farms more than $3 billion in 1986. For the livestock sector, net cash income per farm may climb more than $3,500. The average livestock operation, which typically includes some crop production, had cash income of more than $17,000 this year, because of higher prices, production, and Government payments, and lower expenses.

Under the Tax Reform Act of 1986, the after-tax cost of capital for all farm machinery should increase an average of 11 percent above costs under the current law. The cost of capital for tractors and long-lived equipment should be, respectively, 10.5 and 11.2 percent higher than under the existing law. Because of this, net investment in agriculture during 1986-90 will probably fall below the already negative level which is now occurring.

If marketing loans had been implemented for 1986/87, wheat exports might be only about 30 million bushels higher than without the loans, at a cost of $8 to $9 per added bushel. The per-bushel cost of extra corn and soybean exports would also be well above current market prices.

A large-scale acreage reduction program designed to idle 125 million acres, or about half of the program acreage base, could raise U.S. farm prices 30 to 40 percent above 1985/86 (by comparison, the 1986 program idled about 44 million acres). As a consequence, Government outlays for price and income supports would fall to nearly zero after several years, and farmers' net cash income would probably rise. In contrast, outlays for fiscal 1986, which include advance deficiency and dairy termination payments, totaled $25.8 billion.

However, large farm price increases would likely reduce U.S. farm exports 30 to 50 percent. Also, the mix of foods purchased by domestic consumers would shift away from more expensive high-value products in response to a 30-35 percent rise in retail food prices. These declines would cut agriculture's contribution to U.S. GNP by $50 to $75 billion per year. As many as 2 million jobs might be lost on farms and in the inputs and marketing industries.

With U.S. planted acreage expected to fall again in 1987/88 under the 1985 Farm Act, the outlook for the inputs industries remains weak. Employment dropped an average 10 percent a year during 1982-84 in the fertilizer industry, 11 percent in the farm machinery industry, and 4 percent in the pesticide industry.

Agricultural Economy

LIVESTOCK OVERVIEW

Increased slaughter of female stock in the cattle and hog sectors since 1982 has helped hold up red meat supplies, despite declines in animal numbers (table 16). However, stronger livestock prices and lower production costs have resulted in improved net returns to livestock producers in 1986. Consequently, red meat supplies are likely to decline further in 1987 as cattle and hog numbers start to stabilize. Total per capita red meat and poultry supplies are expected to be nearly record large in 1986 (table 10). Per capita consumption from 1970 through 1985 averaged 204 pounds. It peaked in 1985 at nearly 215 pounds and may be slightly lower this year.

Poultry production continues to expand, with producers exploiting poultry's shorter biological cycle to respond to low prices. In light of expected lower supplies of competing red meats in 1987, poultry production may rise 8 percent. However, meat prices probably will remain under some pressure, since total supplies will be at record levels and the economy is still expanding only moderately.

Poultry products such as nuggets and strips have been introduced into many more restaurants this year, boosting broiler prices more than might have been expected, given the continued general production increases. Hot weather this summer added to price strength; the heat caused concerns over supplies, as some bird deaths and slower weight gains held down production increases. Declining feed costs this year and higher poultry prices, particularly last summer, resulted in further improvement in already positive net returns.

Hog producers' returns increased dramatically this summer. The hog-corn ratio, a general measure of profits to hog producers, reached the highest since the data series began in 1909. Profitability in hog production normally leads to an expanded breeding herd and year-over-year increases in sows farrowing about two quarters after profitability sets in.

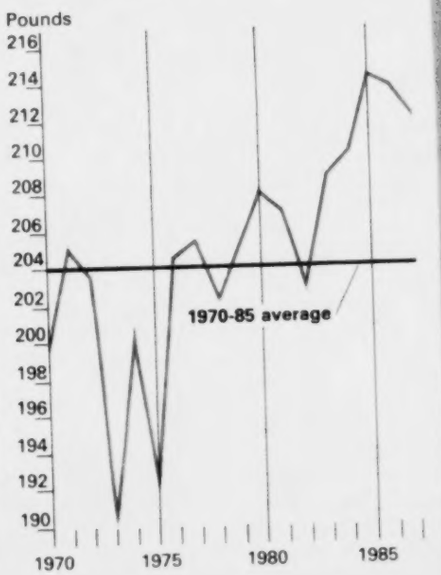
However, hog producers' response to the higher returns in 1986 may be moderated by recent financial difficulties. Stricter bank lending requirements may force the continued marketing of female stock to improve the debt-equity ratio on many farms.

Pork production in 1986 may be down about 5 percent from a year earlier, with second-half output down about 7 percent. As pork supplies declined through summer, prices rose sharply from $43 per cwt in the first quarter, to $47 in the spring, to a peak of $61 during the summer. Fall-quarter prices declined to $53 to $56 but likely will average about $10 above last fall. For all of 1986, prices will average $51 to $52, up from near $45 in 1985.

The **cattle** industry has likely reached an end to its extended inventory adjustment. The January 1, 1987, cattle inventory may total about 100 million head, down from about 102 million a year earlier. But, lower feeding costs, a record-large hay crop, and much improved forage conditions will provide a base to stabilize the inventory over the next couple of years, so the January 1, 1988, figure may still be close to 100 million head.

Net returns to cattle feeders and cow-calf operations have increased, and both have likely covered cash costs in 1986. Herd reductions since 1982 and the sixth consecutive decline in the calf crop this year are likely to result in sharply reduced beef supplies in the future. Feeder cattle supplies outside feedlots on October 1 were down 7 percent from a year ago; the yearling supply was down 17 percent.

Per Capita Meat Consumption Staying Near Record High



Fed and nonfed beef supplies for 1986 remain large. Beef production this year is likely to be about 2 percent above 1985, largely because of the increased dairy cattle slaughter under the Dairy Termination Program (DTP). However, Government purchases of beef and other meats have largely offset increased supplies from the DTP. The first DTP period ended in August and with it ended the largest impact on the beef industry from the program.

Fed cattle marketings in 1986 remain near levels of the past several years. Some additional female stock is expected to be retained over the next couple of years, but any herd expansion will be very slow. Thus, fairly large numbers of heifers will continue to be available for feedlot placement.

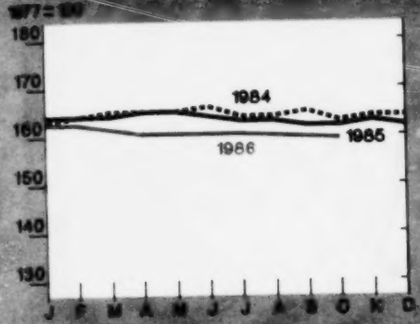
Prices for Choice fed steers at Omaha increased from $54.52 per cwt this spring to near $60 in early fall. Prices for 1986 as a whole may average about the same as 1985's $58.37. With lower feed costs, feeder steer prices have strengthened along with fed cattle prices. However, prices for yearling feeder steers at Kansas City this year may average near a year ago. Prices this summer averaged about $3 per cwt above a year earlier and are maintaining a $3 to $4 premium this fall.

Utility cow prices at Omaha continue to average $37 to $38 per cwt. Prices

Prime Indicators of the U.S. Agricultural Economy

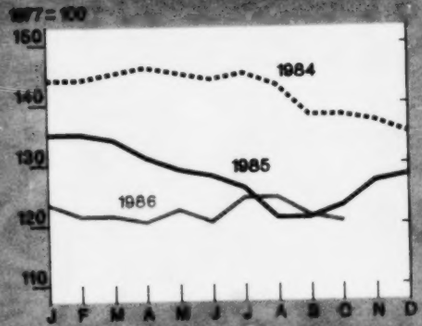
Index of prices paid by farmers[1]

1977 = 100



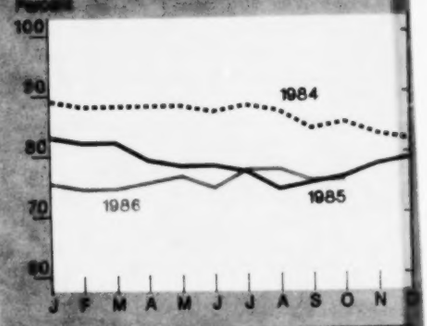
Index of prices received by farmers[2]

1977 = 100



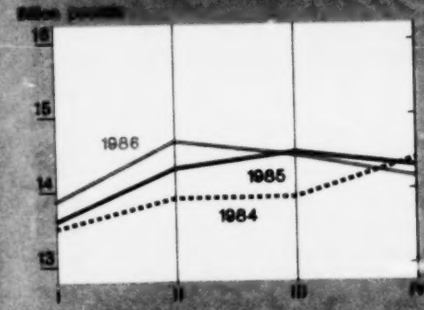
Ratio of prices received to prices paid

Percent



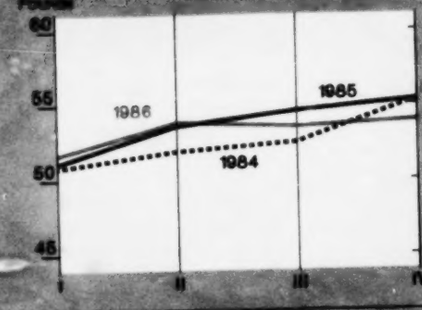
Red meat & poultry[3] production

Billion pounds



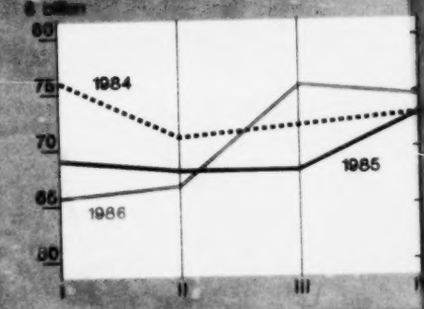
Red meat & poultry consumption, per capita[3,4]

Pounds



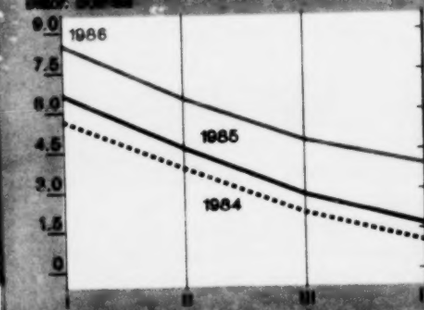
Cash receipts from livestock & products[5]

$ billion



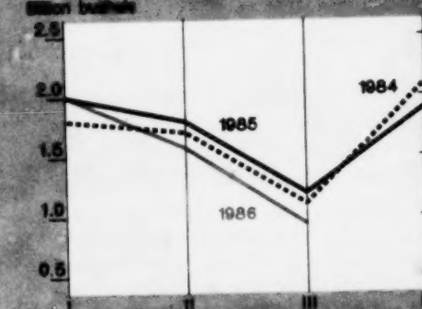
Corn beginning stocks[6]

Billion bushels



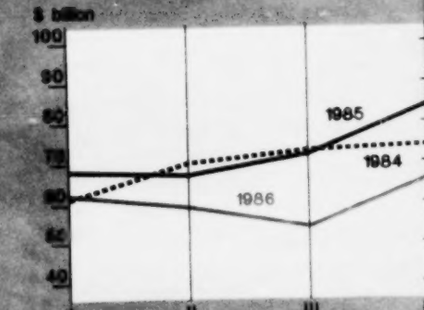
Corn disappearance[6]

Billion bushels



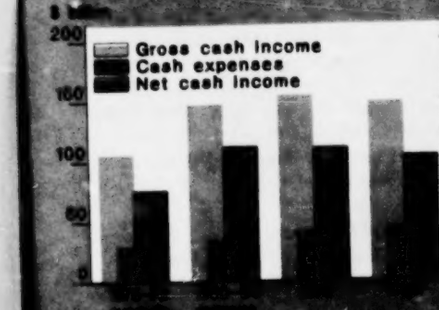
Cash receipts from crops[5]

$ billion



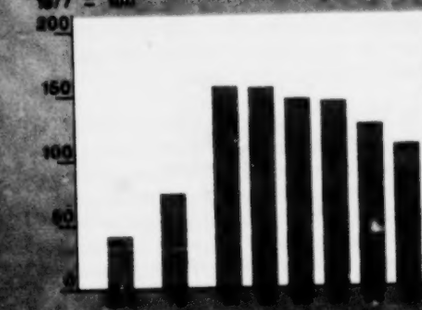
Farm net cash income

$ billion



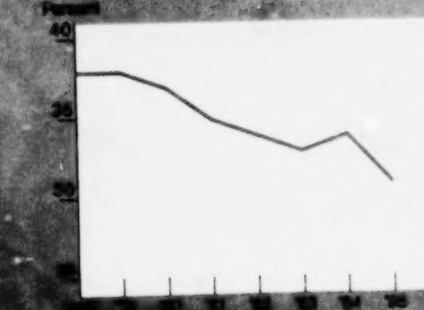
Farm real estate value

1977 = 100



Farm value/retail food costs

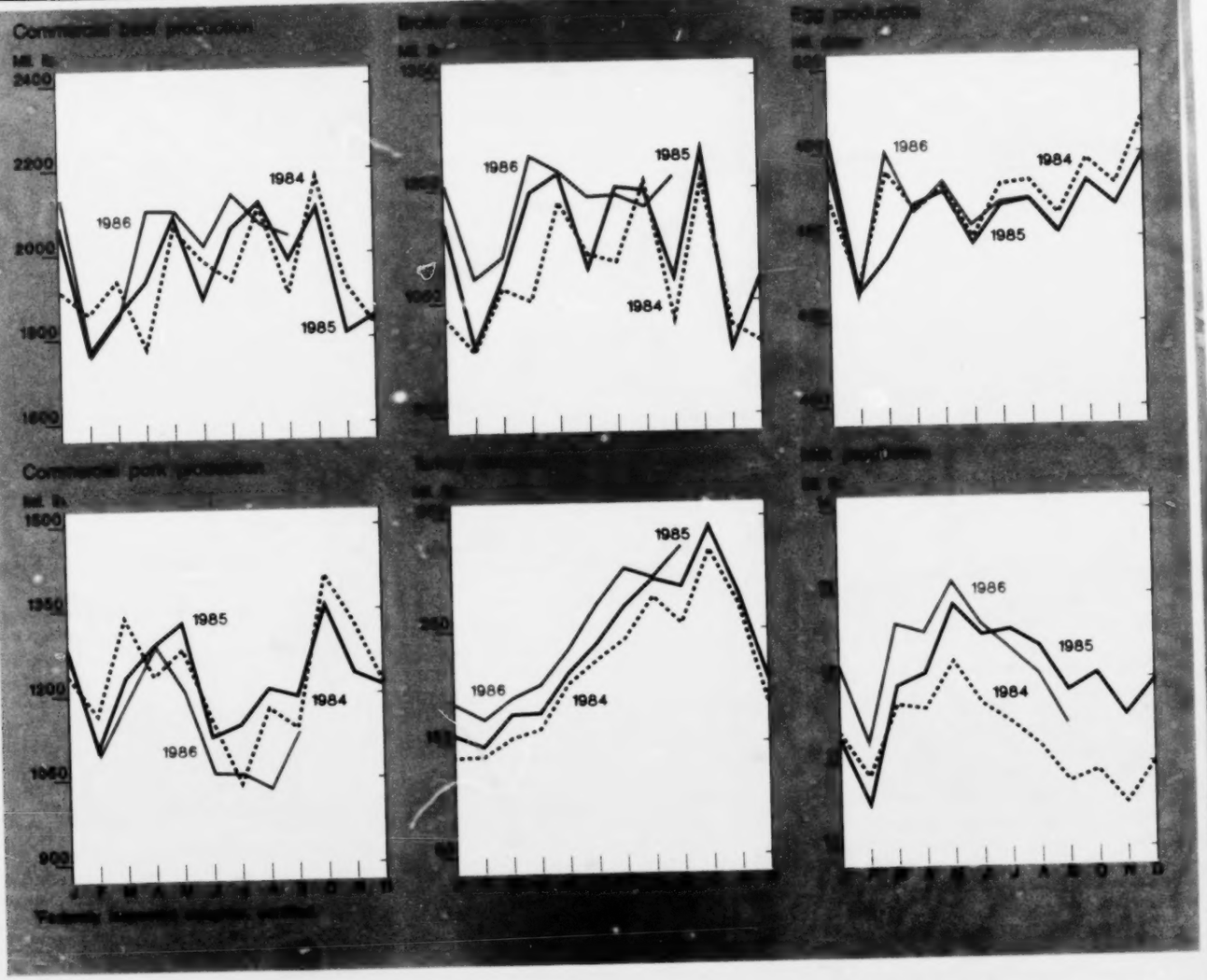
Percent



[illegible]

[illegible]

[illegible]



declined to the low $30's in early April over concern about the impact of the DTP. However, prices strengthened and remained fairly stable through early fall, as Government meat purchases offset the DTP supplies.

Poultry production in 1986 is expected to be 6 percent above a year earlier (table 13). **Broiler** production may rise about 4 percent, the same as a year ago. Production was up only 3 percent this summer, compared with a 5-percent year-to-year gain this past spring and an expected 4-percent rise this fall. Without the heat, production might have been somewhat larger this summer.

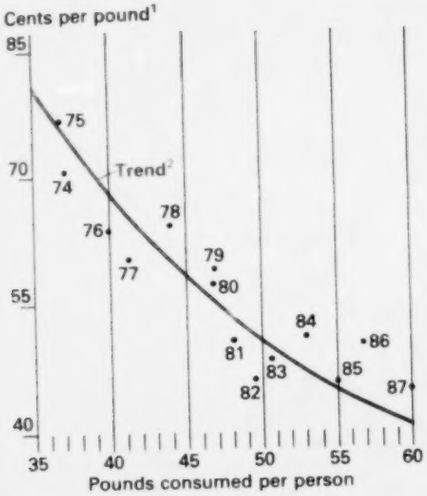
Turkey production is expected to be up 12 percent in 1986, following no change in 1984 and a 9-percent gain in 1985. Turkey stocks at the beginning of the fall holiday season were the third largest since 1960, with whole-bird stocks up 16 percent from a year earlier. With both production and stocks up, available fourth-quarter turkey supplies will be up sharply from a year ago.

The 12-city broiler price this fall is expected to average 54 to 57 cents per pound, well above last fall but down from the record 66.6-cent average this summer. For the year, broiler prices may average 56 to 57 cents a pound, up from 50.3 in 1985. Turkey prices this fall are likely to average about the same as the summer quarter's wholesale New York average of 79.8 cents. For the year, prices may average 72 to 73 cents a pound, down from 75.5 in 1985.

Egg production in 1986 is likely to be about the same as a year ago. Consumption will probably total around 252 eggs per person, down from 255 last year, continuing the long downward trend. For the year, wholesale egg prices at New York may average 70 to 71 cents a dozen, up from 66.5 cents a year earlier.

After sizable summer rises, wholesale prices of **dairy** products have been

Lower Prices Help Push Up Broiler Consumption



1986 estimated; 1987 forecast.
[1]Wholesale price, 12-city average, 1982 dollars.
[2]Ln consumption = 6.952-0.774 (Ln price).

fairly steady since early September (table 14). Butter prices stayed near the level at which the CCC will sell butter back to the industry. Increased supplies of cream from the fluid milk industry eliminated the need to buy from Government stocks but have not been sufficient to lower prices. American cheese prices have firmed but remain near late-summer levels. Prices of nonfat dry milk held steady during the summer but edged up about a penny a pound in October.

The 1986 seasonal increases in wholesale prices have been similar to those in most years of the 1970's. Reductions in milk output because of the Dairy Termination Program, continued growth in commercial use, and low commercial stocks reestablished a balance in commercial dairy markets—at least temporarily. Some further increases in cheese and nonfat dry milk prices are possible as the tightest season nears, but additional rises probably will be small.

The Minnesota-Wisconsin (M-W) price of manufacturing grade milk, the basic mover of most farm milk prices, has followed wholesale dairy product prices upward. In October, the M-W price was $12.69, up 71 cents from May and 48 cents above a year earlier. The October M-W price will determine the December price of milk used for fluid milk products.

The average price of all milk was $13 in October, up $1.10 from June and $1.40 higher than a year earlier. The increase in the average price reflected part of the seasonal rise in the M-W price, as well as seasonal increases in the fat content and a greater proportion of milk going to more expensive fluid use.

Seasonal declines in farm and wholesale prices will be sharp this winter. The seasonal return to surplus conditions will combine with a January 1 lowering of the support price to $11.35 per cwt to drop prices by late winter. However, the surplus is not expected to be as large as in most recent years, and the M-W price may stay closer to the support price. *[Ron Gustafson, Allen Baker, Leland Southard, and James Miller (202) 786-1830]*

CROPS OVERVIEW

Although the rate of growth has slowed, foreign production of all major crops except cotton is rising again in 1986/87 (table 25). However, U.S. production is lower because of greater participation in Government commodity programs with increased acreage reduction requirements (table 17). Total U.S. production of the major field crops this season is forecast to be down 8 percent from near-record highs a year ago.

Increased foreign production and lower commodity prices are boosting world consumption of all crops. Stocks of corn, soybeans, and wheat will remain high by historical standards, though, maintaining downward pressure on commodity prices.

Lower U.S. prices allowed by the 1985 Farm Act are enhancing export potential, particularly for cotton and rice. For those crops, the United States may capture much of the gain in world trade volume this year.

Lower world prices are resulting from
- reduced loan rates;
- cotton and rice marketing loan programs, in which producers may repay CCC loans at less than the original loan rate; and
- the freeing up of Government-obligated commodities through generic certificates, issued mainly as partial payment for farmers' participating in commodity programs.

Also, increased acreage reduction requirements, paid land diversion programs, and the Conservation Reserve Program are reducing domestic production capacity. Still, without a major shortfall in world crop output, most world and domestic commodity supply/demand imbalances will not significantly improve soon.

Large **food grain** crops will be harvested worldwide in 1986/87, despite lower U.S. production. Global rice output is projected at 318 million tons (milled basis), while the world's wheat crop will be the largest on record—514 million tons. Stocks will remain well above historical averages and may be a record for wheat in 1986/87.

Foreign crops of wheat and rice are projected to gain 6 and 1 percent, respectively, in 1986/87. Foreign wheat production will be a record 457 million tons, while rice output of 314 million will be just short of the record.

Gains in foreign consumption are leading to a small increase of 2 million tons in world wheat imports. But the 1986/87 import total of 87 million tons (excluding intra-EC trade) is still about 16 million below the average when world trade was at its peak in 1981/82-1984/85. Increased wheat imports are going to Latin America (particularly Brazil) and Africa. In 1987, without the record Brazilian imports, world rice trade will drop.

Halfway through the U.S. marketing year for wheat, despite the smallest harvest in 6 years and a 10-percent increase in total disappearance over a year ago, wheat prices on the farm are the lowest in 9 years (table 18). Large domestic supplies, due to record carryin stocks, are keeping prices down.

Although three-fourths of total domestic wheat stocks are isolated from the market, some Government-obligated stocks are being freed by generic certificate exchanges. Since April 1986, certificates have been issued to farmers through program payments and to grain merchants through the Export Enhancement and Targeted Export Assistance programs. By October, however, improved Durum wheat exports, the reduced forecast for the 1986 Soft Red Winter harvest, and delayed seeding of next season's winter wheat crop lifted prices above the loan rate for these classes.

For the other wheat classes (Hard Red Winter, Hard Red Spring, and White),

1987 Crop Program Provisions

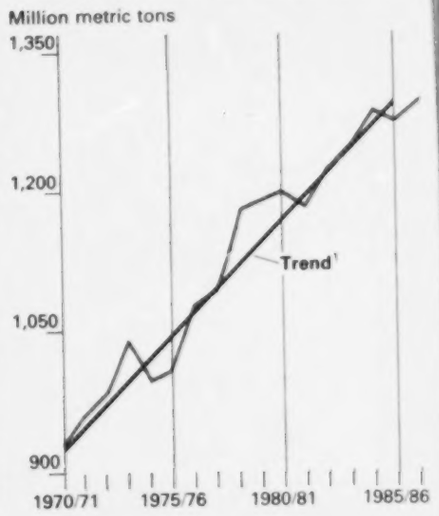
Provisions for 1987 crop programs have been announced. General provisions include the following:

- Marketing loans and certificates are given for cotton and rice.
- A producer may reduce permitted planting (base minus ARP and PLD) by 8 to 50 percent and still get deficiency payments as if 92 percent were planted.
- Limited cross compliance is in effect—a producer must plant within base acres on other crops.
- The State Agricultural Stabilization and Conservation committee can okay grazing but no haying some months on ARP land, and can allow both haying and grazing on underplanted land.

Loan rates, target prices, and other provisions are as follows:

	1986	1987
WHEAT		
Loan rate ($/bu.)	2.40	2.28
Target price ($/bu.)	4.38	4.38
Acreage reduction prog. (%)	22.5	27.5
Paid land diversion (%)	2.5	0
Est. deficiency payments ($/bu.)	1.98	2.10
Advance deficiency payments (%)	50	40
Percent of advance paid in cash	60	50
Percent of advance paid in certificates	40	50
CORN		
Loan rate ($/bu.)	1.92	1.82
Target price ($/bu.)	3.03	3.03
Acreage reduction prog. (%)	17.5	20
Paid land diversion (%)	2.5	15.0
Est. deficiency payments ($/bu.)	1.11	1.21
Advance deficiency payments (%)	50	40
Percent of advance paid in cash	60	50
Percent of advance paid in certificates	40	50
Diversion payments ($/bu.)	.75	2.00
Percent of diversion paid in cash	0	50
Percent of diversion paid in certificates	100	50
OTHER FEED GRAINS:		
GRAIN SORGHUM		
Loan rate ($/bu.)	1.82	1.74
Target price ($/bu.)	2.88	2.88
Est. deficiency payments ($/bu.)	1.06	1.14
Diversion payments ($/bu.)	.65	1.30
BARLEY		
Loan rate ($/bu.)	1.38	1.49
Target price ($/bu.)	2.48	2.60
Est. deficiency payments ($/bu.)	1.04	1.11
Diversion payments ($/bu.)	.57	1.40
OATS		
Loan rate ($/bu.)	.99	.94
Target price ($/bu.)	1.60	1.60
Est. deficiency payments ($/bu.)	.55	.55
Diversion payments ($/bu.)	.36	.80
COTTON		
Loan rate ($/lb.)	.99	.9223
Target price ($/lb.)	.81	.794
Acreage reduction prog. (%)	25	25
Paid land diversion (%)	0	0
Est. deficiency payments ($/lb.)	.26	.2715
Advance deficiency payments (%)	40	30
Percent of advance paid in cash	75	50
Percent of advance paid in certificates	25	50
RICE		
Loan rate ($/cwt)	7.20	6.84
Target price ($/cwt)	11.88	11.66
Acreage reduction prog. (%)	35	35
Paid land diversion (%)	0	0
Est. deficiency payments ($/cwt)	4.70	4.82
Advance deficiency payments (%)	40	30
Percent of advance paid in cash	75	50
Percent of advance paid in certificates	25	50

World Wheat & Coarse Grain Consumption in 1986/87 Close to Trend



1986/87 consumption forecast.
¹Trend consumption = -758.3 + 24.2 (year).

prices have languished because of large supplies and lower-than-expected loan placements of new-crop wheat. Overall, prices are not expected to rise much as the marketing year progresses, unless 1987/88 winter wheat seeded acreage falls below expectations or poor weather through next spring damages the crop.

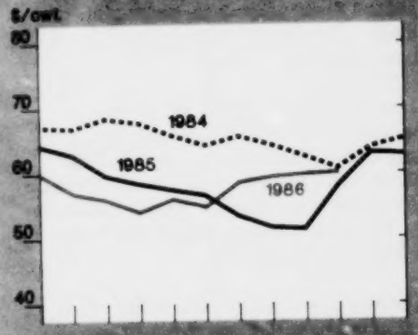
Wheat plantings for 1987 could fall slightly because of increased program participation and a rise in the acreage reduction requirement from 25 to 27.5 percent. Rice plantings are projected to gain slightly, with the acreage reduction requirement constant at 35 percent of base and program participation anticipated to be around 95 percent.

World **coarse grain** production in 1986/87 is forecast at 830 million tons, 17 million below last season's record, but well above projected world utilization. So, world ending stocks are expected to increase again.

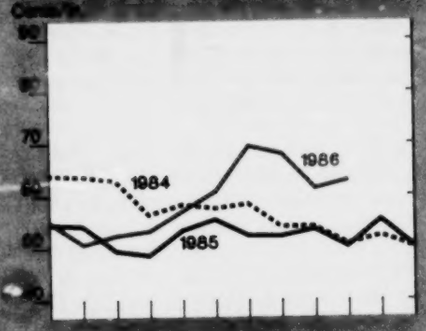
Foreign production is projected at 580 million tons, up 7 million from 1985/86. Larger crops in China, South Africa, and Canada are offsetting smaller production in Western Europe and Thailand. Foreign corn output has gained 14 million tons to a record 270 million. Despite a record Canadian barley crop, foreign barley production is off slightly because of a 9-percent drop in the EC.

Commodity Market Prices

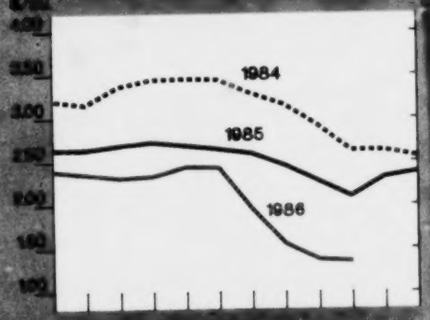
Choice steers, Omaha



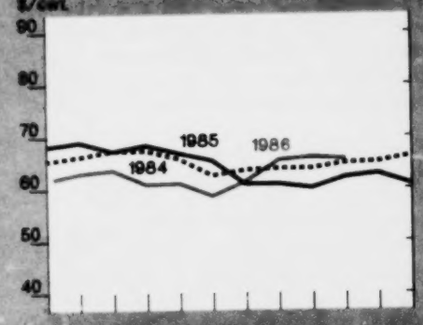
Broilers, 12-city average



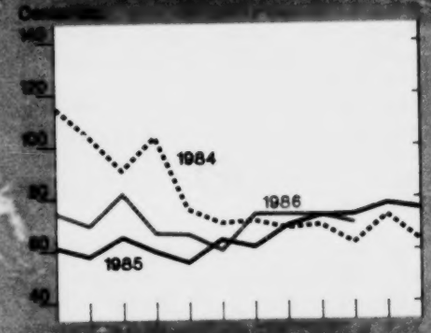
Corn, Chicago[2]



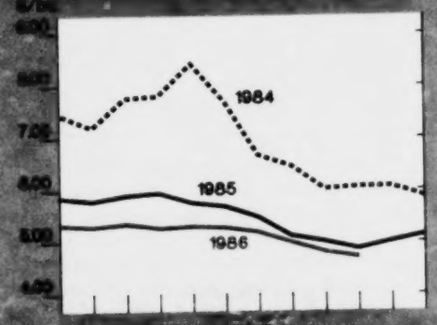
Feeder cattle, Kansas City[1]



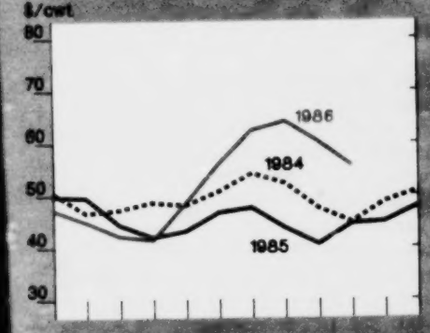
Eggs, New York[3]



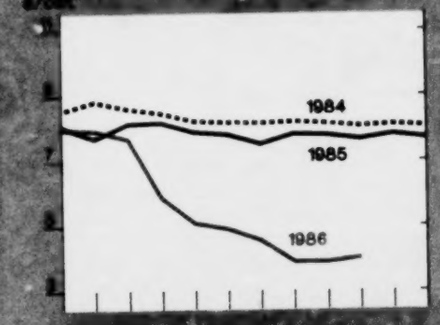
Soybeans, Chicago[2]



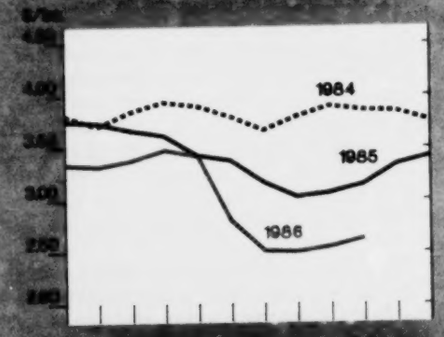
Barrows and gilts, 7 markets



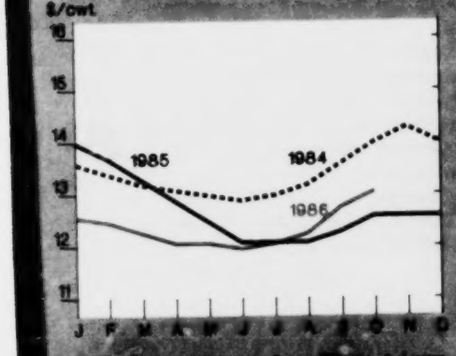
Rice, rough, Gulf Louisiana



Wheat, Kansas City[2]

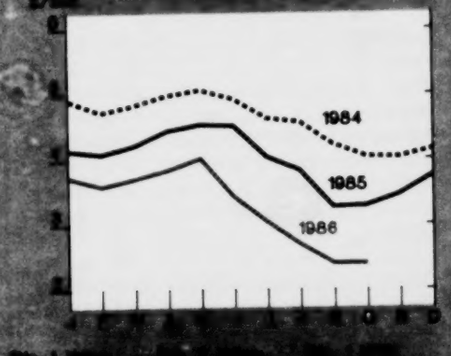


All milk

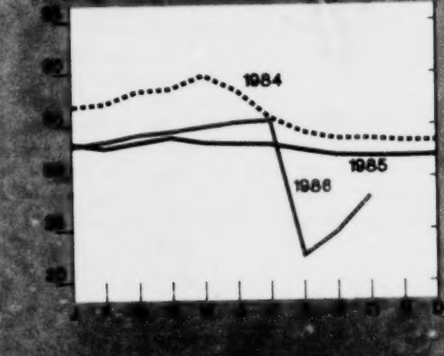


500-700 lbs., medium no. 1, Omaha A Lean

Sorghum, Kansas City

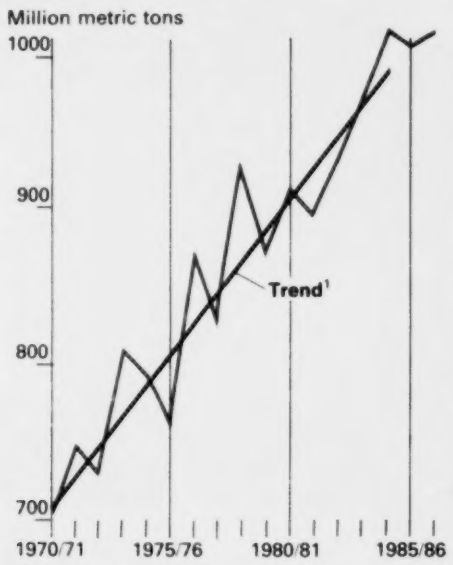


Cotton, average spot middling



December 1986

Foreign Wheat & Coarse Grain Output Rose Sharply Until 1984/85



1986/87 output forecast.
[1]Trend production = -669.3 + 19.7 (year).

Foreign coarse grain utilization will likely expand by under 2 percent during 1986/87. This gain exceeds the growth of production; however, foreign stocks will increase slightly and foreign imports may rise marginally to 85 million tons (excluding intra-EC trade).

U.S. exports are expected to expand by about 4 million tons; larger shipments by Canada (barley) and South Africa (corn) also are projected. Despite these gains, world trade remains depressed compared with the first half of the 1980's. Much of the recent drop is due to lower Soviet imports—1986/87 USSR imports are down about 15 million tons from 2 years ago.

The 1987 U.S. feed grain program requires participating farmers to reduce acreage by 20 percent of their base to be eligible for price supports and other program benefits. Also, the Government is offering to pay farmers extra to divert an additional 15 percent of their acreage to conserving uses. The 15-percent diversion is not required to be eligible for target price protection and nonrecourse loans, but most feed grain farmers will find the extra payment attractive and will leave 35 percent of their acreage idle. The 1986 acreage reduction and paid land diversion programs totaled 20 percent.

Per-bushel diversion payments for grain that otherwise would have been grown will be $2 for corn, $1.90 for sorghum, $1.60 for barley, and 80 cents for oats. Participants may receive 40 percent of the estimated deficiency and half of the diversion payment in advance. Fifty percent of the payment will be in cash and the other half in generic certificates.

Sign-up for next season's feed grain programs will run from November 17 through March 30. Target prices for the feed grains will not change from last year, but effective loan rates will be lower—$1.82 for corn, $1.74 for grain sorghum, $1.49 for barley, and 94 cents for oats.

Feed grain plantings next spring should fall significantly from a year earlier, with higher program participation, an increase in the set-aside requirement, and a strong response to the voluntary paid diversion program. Oat area, however, should rise significantly as farmers increase use of oats as a cover crop on idled conserving use acreage.

Record output of soybeans, peanuts, and rapeseed is expected to push world **oilseed** production in 1986/87 to a new high of 198 million tons. Bigger foreign production will more than offset a projected 7-percent decline in U.S. output. While world oilseed crush will increase, ending stocks of oilseeds will rise more than 13 percent. Soybean and rapeseed stocks will hit records (table 21).

Despite an expected rise in U.S. soybean meal stocks, larger world meal consumption will drive world ending stocks of all meals to their lowest level in 4 years. But, world oilmeal trade will show little growth. Since no significant gains in world soybean meal trade are likely and Southern Hemisphere supplies will increase, U.S. soybean meal exports are likely to decline 2 percent.

Large supplies of edible oils will keep world market oil prices depressed. Palm oil production is up again and is expected to account for the largest share of world vegetable oil exports for the third consecutive year. U.S. soybean oil shipments are likely to decline for the fifth consecutive year.

Monthly soybean prices in Central Illinois fell from an average of $5.15 a bushel in July to $4.50 in October, reflecting the drop in the 1986 loan rate to $4.77. Prices are not expected to rise much during the marketing year. Both domestic crush and exports are forecast to move up slightly in 1986/87. But, with the 2.01-billion-bushel crop surpassing expected disappearance, ending stocks likely will rise 15 percent to 615 million bushels.

The world glut of **cotton** is beginning to ease in 1986/87 as production falls and consumption rises, but ending stocks will remain excessive. World production is forecast to fall 9 percent to 72 million bales, the lowest since 1983/84's 68 million.

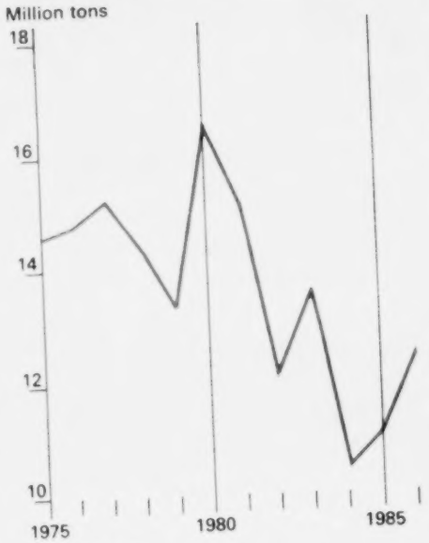
Consumption will reach a fifth consecutive record, rising more than 3 percent to 77 million bales. Exports also will expand by 2.6 million bales, a 13-percent increase. Global stocks will fall from 48 million bales to 42 million by the end of the season, but they still will be well above the 20-25 million bales common prior to 1984/85.

Foreign production will drop 3 million bales while consumption grows a healthy 3 percent. Thus, foreign stocks at the end of 1986/87 will be down 5 percent below 1985/86. Foreign exports likely will drop 2.2 million bales as the U.S. market share rebounds to a more normal 29 percent. The United States is expected to account for two-thirds of the worldwide reduction in stocks this year (table 19).

A major goal of the farm bill's cotton provisions is to reduce domestic stocks to about 4 million bales over the next 5 years. The 1986 cotton program initially was expected to lower stocks 25 percent to 7 million bales. However, stronger-than-expected domestic use, a more than threefold rise in exports, and a smaller crop likely will lower carryover stocks further than that. Based on November 1 crop estimates, 1986/87 carryover is projected to fall 40 percent to 5.6 million bales, only 1.6 million above the target.

Domestic plantings in 1987 may exceed 1986's 9.5 million acres. Participation in the 1987 cotton program is anticipated to fall slightly because of stronger marketings and the recently announced $250,000 limit on total program payments. *[Michael Hanthorn (202) 786-1840 and Frederic Surls (202) 786-1691]*

U.S. Citrus Production
Rebounding from Freeze Damage



1986 forecast.

As of November 1, U.S. citrus **fruit** production for 1986/87 was forecast at 12.4 million tons (excluding California's grapefruit outside of the desert areas). This is 14 percent above 1985/86, despite reduced acreage. All citrus crops are forecast higher, primarily because of favorable weather.

Because the economy is growing only slowly, domestic demand for fresh citrus fruit will probably be stable. Export prospects for U.S. oranges and grapefruit are likely to improve because the prices are expected to be lower than last season and the dollar has weakened against some currencies. Strong movement of frozen concentrated orange juice (FCOJ) will maintain processor demand for oranges. But, processor demand for grapefruit is not expected to be as strong as last season in view of larger carryover stocks of most grapefruit products.

The 1986/87 output of FCOJ in Florida should exceed last season's 132 million gallons because of the larger orange crop and higher juice yield. The first forecast for 1986/87 yield is 1.44 gallons a box at 42.0 degrees Brix, compared with 1.33 last season. Domestic supplies will still be small because of expected lower carryin stocks. To meet domestic demand, FCOJ imports will remain relatively heavy.

However, the recent preliminary ruling by the Department of Commerce that Brazilian FCOJ is being exported to the United States at less than fair value may lower imports during 1986/87 or make them more expensive. The final decision on an additional tariff is scheduled no later than March 9, 1987. After Brazilian exporters recently raised prices on their FCOJ, Florida packers also raised prices, going from $3.84 to $4.08 per dozen 6-ounce cans (unadvertised brand, f.o.b. Florida canneries). This compares with $4.60 a year ago. If demand continues steady, prices are likely to remain firm.

Fresh-market **vegetable** acreage for 1986 is expected to be 2 percent below the 772,000 harvested last year. However, supplies of fresh vegetables are keeping pace with a year earlier and holding the lid on grower prices so far in 1986 (table 23).

Area for harvest of the major fresh-market vegetables during the fall is estimated at 136,200 acres, near last season. Lettuce acreage, which accounts for approximately 37 percent of all fall acreage, dropped 1 percent to 50,200.

California has 82 percent of lettuce acreage, with the majority of the fall area in the central coast region. California lettuce growers reduced acreage about 1 percent from last year to 41,000, while Arizona and Florida dropped acreage 8 percent to 6,000. If lettuce supplies remain level with last year, prices are likely to stay strong for the remainder of 1986, averaging around $12.00 per cwt.

Florida's total winter vegetable acreage was steady with last year. Tomato acreage for this fall rose 31 percent to 15,700, while sweet corn acreage dropped 23 percent to 9,300. Grower prices for sweet corn are lower than normal this fall because of large summer supplies, which encouraged some growers to switch to alternative crops.

The 1986 average index of grower prices for fresh-market vegetables is likely to be 1 to 2 percent above last season's 125 (1977=100). Most of the price strength comes from smaller lettuce supplies during the second quarter—down 10 percent from a year earlier. Supplies for the fourth quarter appear to be comparable with last year's 47 million cwt. Fourth-quarter prices usually rise about 5 to 10 percent over the third quarter as vegetable production becomes centered in Florida and California.

The November 1 *Crop Production* report indicated that U.S. dry bean production will be 22.7 million cwt, near last year's 22.3 million. This is a 17-percent downward revision since August, the drop due to heavy rains and flooding that hit the Midwest during September.

World centrifugal **sugar** production for 1986/87 is forecast at 100.1 million metric tons, raw basis, up 2 percent from 1985/86's estimated 98.1 million. Cane sugar production is forecast to rise 4 percent and beet sugar production to drop 2 percent.

Rising output in Brazil and Asia accounts for almost 70 percent of the cane sugar increase. Falling production in the EC and the USSR accounts for most of the lower beet sugar forecast.

World sugar consumption for 1986/87 is forecast at 99.7 million metric tons, up 2 percent from 1985/86's 97.7 million because of higher consumption in Asia, Africa, and South America. U.S. consumption is forecast to decline about 145,000 tons.

The forecast world production and consumption will mean an addition to world stocks in 1986/87 for the sixth consecutive year. The world price averaged only 5.42 cents a pound in October.

U.S. beet and cane sugar production in 1986/87 is forecast at 6.4 million short tons, raw value, up 5.6 percent from last season (table 24). The November forecast for 1986-crop sugarbeet production is 24.8 million tons, up 9.4 percent from last year. Heavy rains in Michigan have reduced both acreage and yields from earlier forecasts. U.S. sugarcane area is forecast at 801,400 acres, up 4.1 percent from last year, mostly because of a 10-percent acreage increase in Louisiana. U.S. raw sugar prices (Contract No. 14, nearby futures) averaged 21.04 cents a pound in October and 20.46 cents a pound in 1985/86. *[Ben Huang, Shannon Hamm, and David Harvey (202) 786-1770]*

COMMODITY SPOTLIGHT

What Would Marketing Loans Cost For Wheat, Corn, and Soybeans?

The 1985 Farm Act gives the Secretary of Agriculture discretion to allow farmers to repay their price support loans at less than the original loan rates. The resulting "marketing loans" could under certain conditions lower U.S. crop prices and enhance exports. U.S. grain exports are forecast to rise during 1986/87 even without marketing loans, but not by enough to significantly reduce stocks. Consequently, it has been suggested that marketing loans be implemented for wheat, feed grains, and soybeans.

Interest in marketing loans is being piqued by the extraordinary rise in 1986/87 cotton export commitments (shipments to date plus outstanding sales). Because of much lower prices this year, and reduced exports last year in anticipation of lower prices, cotton export commitments in 1986/87 are more than 240 percent above 1985/86.

In contrast, wheat export commitments are only 11 percent higher than a year ago, soybeans are 21 percent higher, while feed grain commitments are actually 22 percent lower. Would the performance of grain and soybean exports match that of cotton under a marketing loan program? What would the costs be?

Significant Costs

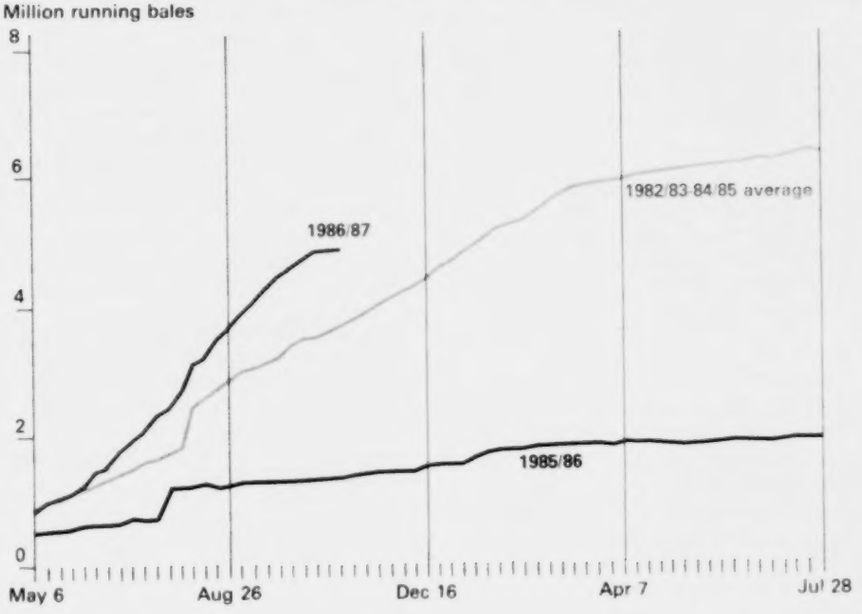
If USDA had established a marketing loan for the other six crops eligible under the 1985 Farm Act (wheat, corn, grain sorghum, barley, oats, and soybeans), crop-year net lending would have totaled an additional $1.8 billion for 1986 programs. About 80 percent of the additional outlay would have been for corn and soybeans.

Marketing loans keep regular loan rates from becoming price floors for program crops. Implementation requires USDA to establish a formula for defining a commodity's world market price and to announce that price periodically.

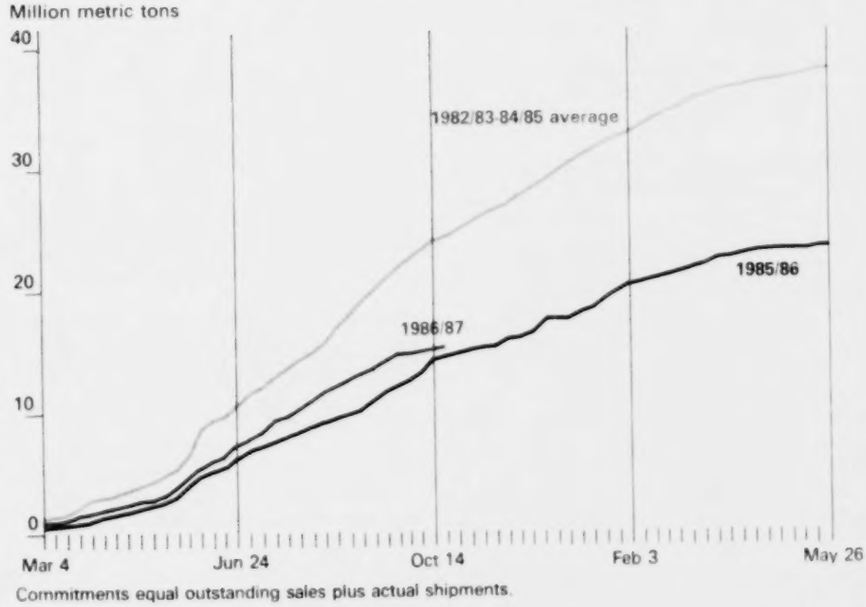
For wheat and feed grains, a farmer would repay a support loan at the prevailing world price or 70 percent of the basic loan rate, whichever was higher, or a loan deficiency payment could be offered in lieu of placing grain under loan. For soybeans, the repayment rate would be the lower of the announced world price or the effective loan rate.

Take wheat as an example. The Farm Act set the basic loan rate for 1986 at $3 per bushel and gave the Secretary authority (which was exercised) to reduce this amount by 20 percent to $2.40. With the 4.3-percent Gramm-Rudman-Hollings reduction, the effective loan rate for wheat this marketing year is $2.30 per bushel—the amount farmers will repay when redeeming 1986 loans without certificates. Implementation of a marketing loan, however, would lower the repayment rate to the higher of the announced world market price or $2.10 (70 percent of the $3 basic loan rate).

Cotton Export Commitments More Than Triple a Year Ago . . .

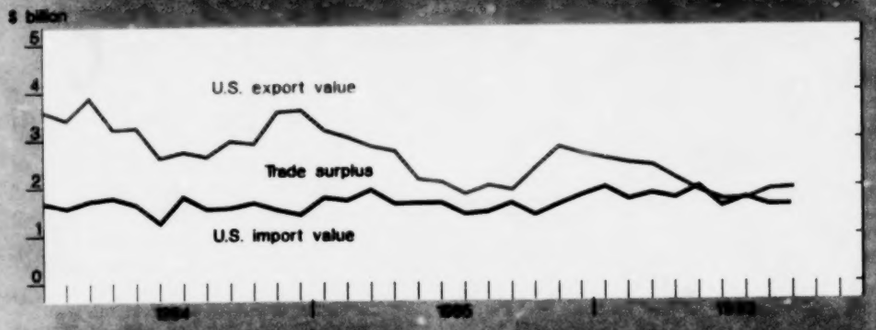


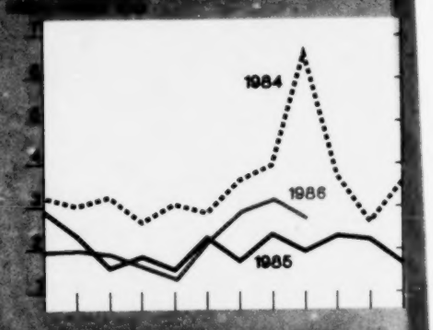
. . . While Wheat Export Commitments Are Up Only 25 Percent



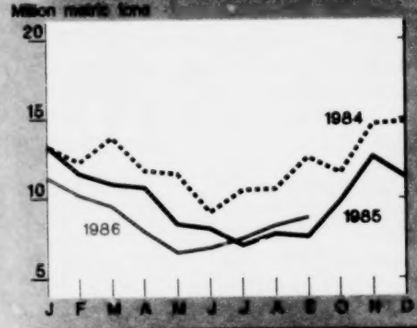
Commitments equal outstanding sales plus actual shipments.

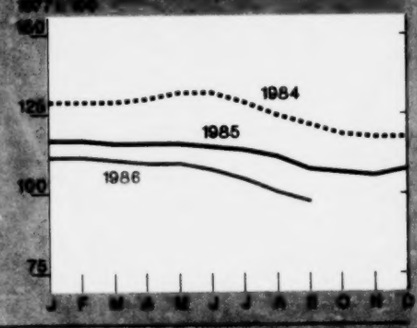
U.S. Agricultural Trade Indicators

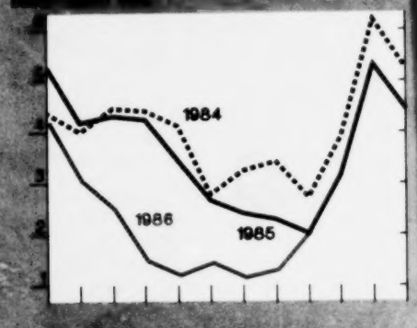




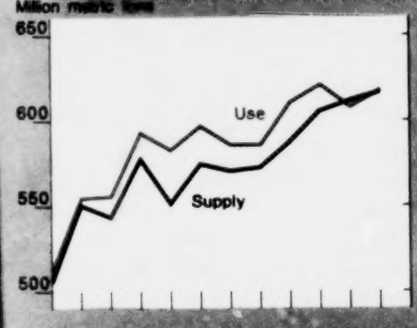
Export volume



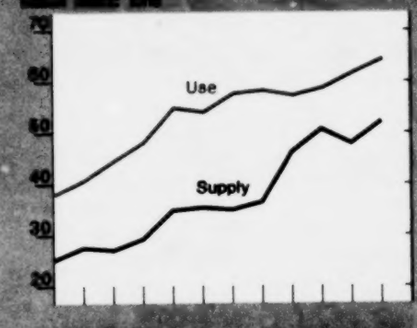


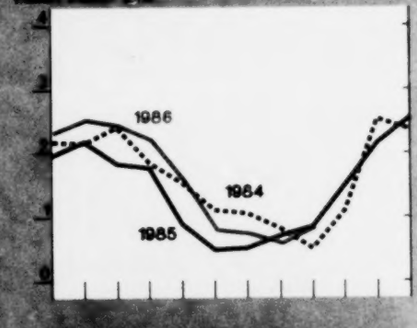


Foreign supply & use of coarse grains

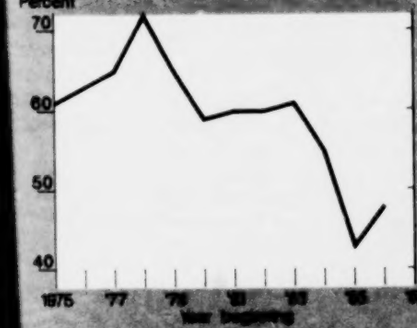


Foreign supply & use of soybeans

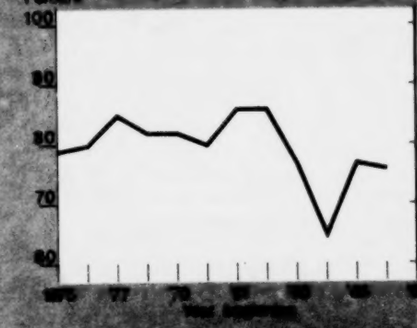


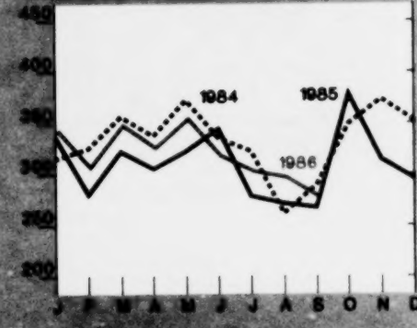


U.S. share of world coarse grains exports[1,2]



U.S. share of world soybean exports





1/ Excluding non-EC trade. 2/ October-September years. 3/ Includes tree fruits.
Note: Wheat, corn, soybean and cotton exchange rates and export will receive the new revision in the U.S. Agricultural Trade Update at the back of this issue.

Projected Marketing Loan Outlays

Commodity, item	Outlay
Wheat	
Basic loan rate ($/bu.)	3.30
Effective loan rate ($/bu.)	2.30
Marketing loan repayment rate ($/bu.)	2.10
Marketing loan ($/bu.)	0.20
Eligible bushels (bil.)	1.64
Gross marketing loan [illegible] ($ mil.)	[illegible]
Loan forfeiture & storage cost savings ($ mil.)	73
Net marketing loan outlays ($ mil.)	[illegible]
Corn	
Basic loan rate ($/bu.)	2.40
Effective loan rate ($/bu.)	1.84
Marketing loan repayment rate ($/bu.)	1.68
Marketing loan ($/bu.)	0.16
Eligible bushels (bil.)	2.01
Gross marketing loan outlays ($ mil.)	[illegible]
Loan forfeiture & storage cost savings ($ mil.)	73
Net marketing loan outlays ($ mil.)	[illegible]
Soybeans	
Basic loan rate ($/bu.)	5.02
Effective loan rate ($/bu.)*	4.56
Marketing loan repayment rate ($/bu.)	4.25
Marketing loan ($/bu.)	0.31
Eligible bushels (bil.)	2.01
Gross marketing loan outlays ($ mil.)	631
Loan forfeiture & storage cost savings ($ mil.)	73
Net marketing loan outlays ($ mil.)	558
Grain sorghum, barley, & oats	
Net marketing loan outlays ($ mil.)	103
Total net marketing loan outlays ($ mil.)	1,030

*Reflects a 4.3-percent [illegible] reduction.

Forecast Results of the Farm Act During 1986/87

Crop	Change from 1985/86 in Exports	Change from 1985/86 in Price supports*	Ratio
	Percent		
Wheat	12	-43	-0.28
Corn	5	-39	-0.12
Soybeans	3	-10	-0.27

*Wheat: $2.30 from $3.30; Corn: $1.84 from $2.59; Soybeans: $4.56 from $5.02.

For wheat and feed grains, the amount of grain eligible for a marketing loan would be the production on farmers' program acreage. Total eligible wheat in 1986/87 would be an estimated 1.64 billion bushels.

With the $2.10-a-bushel repayment rate, gross outlays for a wheat marketing loan this marketing year would be about $320 million (1.64 billion bushels times the 20-cent difference). A world price above $2.10 would reduce the program's cost. For this analysis, it is assumed that loan deficiency payments would not be made. Additionally, actual marketing loan outlays would be the gross outlays minus program cost savings due to both reduced loan forfeitures and lower Government storage costs.

For this exercise, it is assumed that increased commodity exports resulting from marketing loan-induced price reductions would be satisfied by redeemed grain that otherwise would be forfeited to CCC at $2.30 per bushel. It also is assumed that reduced forfeitures would lower CCC storage costs 35 cents per bushel. Therefore, the net marketing loan outlay for wheat in 1986 would be about $250 million (the $323-million gross outlay minus the total per-bushel saving of $2.65 multiplied by the projected increase in wheat exports resulting from the marketing loan).

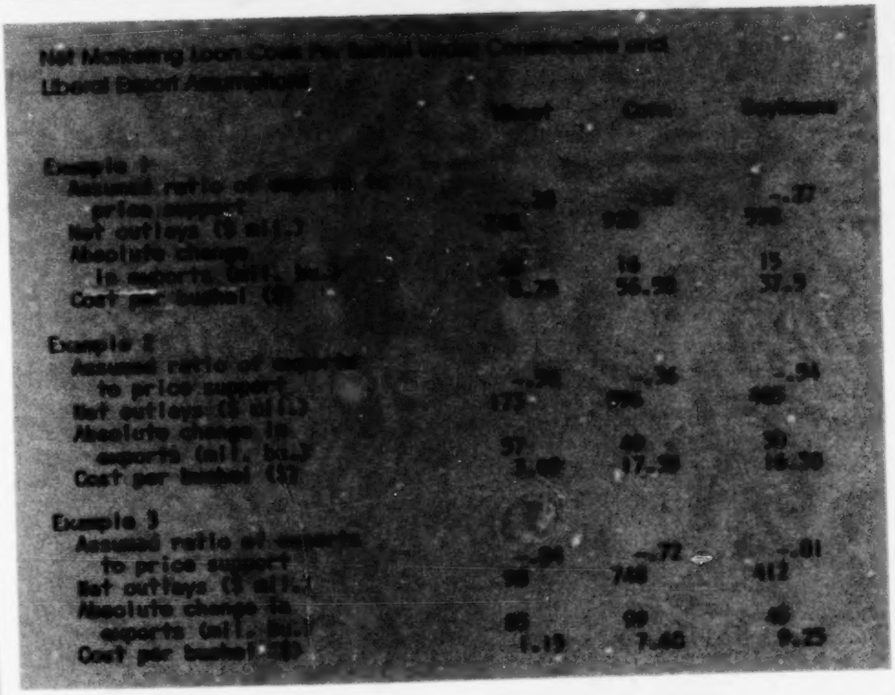
With soybeans, since there are no acreage reduction requirements for farmers receiving a price support loan, the entire crop could be eligible for a marketing loan. The maximum possible cost of a soybean marketing loan for 1986 would be about $560 million (the difference between the $4.56 effective loan rate for 1986/87 and an assumed world price of $4.25 per bushel, times the 2.01-billion-bushel crop, minus the $73-million savings from reduced placements and storage costs). It is assumed that all loans are repaid.

Impact on Exports This Year

A marketing loan for wheat or feed grains essentially would establish a price floor closer to the loan repayment rate, which is 70 percent of the basic loan rate. This means grain programs still would not work the same as the cotton program. For 1986/87, the Government is making U.S. cotton prices competitive on world markets by giving cotton buyers certificates which bridge the entire gap between the loan repayment rate and the world price. Since there is essentially no lower limit on U.S. cotton prices, USDA can reduce domestic prices for cotton more than it can for wheat and feed grains via marketing loans.

For soybeans, however, the loan repayment rate would be set at the lower of the effective loan rate or the prevailing world price. Consequently, a marketing loan program for soybeans could lower domestic soybean prices by however much was needed to meet world competition.

Marketing loans likely would not have had a major impact on U.S. exports this season (1986/87). The additional drop in prices would not be great compared with the percentage declines that already are occurring between 1985/86 and 1986/87.



Large carryin stocks, the big corn crop, lower loan rates, and increased free stocks from generic certificates since April already have significantly lowered domestic corn and wheat prices. And, the Export Enhancement Program has lowered U.S. grain export prices further. Moreover, large world supplies of most agricultural commodities and lagging Soviet purchases are making it difficult to increase U.S. agricultural exports in the near term.

Cost of Added Exports Under Current Assumptions

The assumptions made about how exports would respond to lower prices are critical in estimating per-bushel marketing loan costs. Current U.S. trade estimates for 1986/87, without marketing loans, indicate that wheat exports are rising about 12 percent as the wheat price support is dropping 43 percent, for an export change-to-price change ratio of .28. If that relationship held, marketing loans might boost wheat exports about 30 million bushels this season, to about 1,055 million. With the same type of assumptions for corn and soybeans, marketing loans would increase their exports about 15 million bushels each.

Under these assumptions, the cost of a marketing loan program per bushel of increased exports would probably be very high, because the additional subsidy would be paid on all bushels eligible for price support loans, not just on those exported. If a marketing loan program for wheat cost about $250 million in 1986/87 and exports rose about 30 million bushels, the cost for the additional exports would be between $8 and $9 per bushel. Currently, cash prices for wheat in Kansas City are about one-third that.

A marketing loan program for corn could cost over $50 per bushel of increased exports, roughly 35 times the market price. A marketing loan program for soybeans could cost over $35 per bushel of added shipments, about eight times current market prices.

Cost of Added Exports Under Different Assumptions

Several factors other than U.S. price supports affect exports: the strength of the dollar, foreign production, foreign economic growth, and long-term trade agreements. Furthermore, the effects of lower U.S. prices on foreign production and consumption are likely to become more pronounced over time. Consequently, the effectiveness of a marketing loan program implemented over several years could be greater than current estimates for 1986/87 would indicate.

The above ratios of the change in exports to the change in price supports are lower than would be expected for 1986/87 if a change in U.S. price supports were the only factor in the outlook. This season, the absence of Soviet buying, in particular, is holding down the export response to lower prices. Trying to boost U.S. exports in the current environment of large world supplies is like trying to push a chain uphill. But conditions will eventually change.

If the export responses to lower prices were twice this season's indicated ratios for wheat and soybeans and three times this season's indicated ratio for corn, then implementation of a marketing loan program would boost wheat exports nearly 60 million bushels, corn exports about 50 million, and soybean exports 30 million bushels. The added exports would not affect gross marketing loan outlays, but loan forfeiture and storage cost savings would be two times current indications for wheat and soybeans and three times for corn.

Consequently, net marketing loan outlays would drop to about $170 million for wheat, $860 million for corn, and $485 million for soybeans. This would mean that the net cost of a marketing loan program for wheat would drop from $8-$9 per bushel of increased exports to about $3. The cost for corn would drop to about $17, and soybeans would drop from more than $35 per bushel to about $16. If the export response to lower prices were even greater, the per-bushel costs would drop still further.

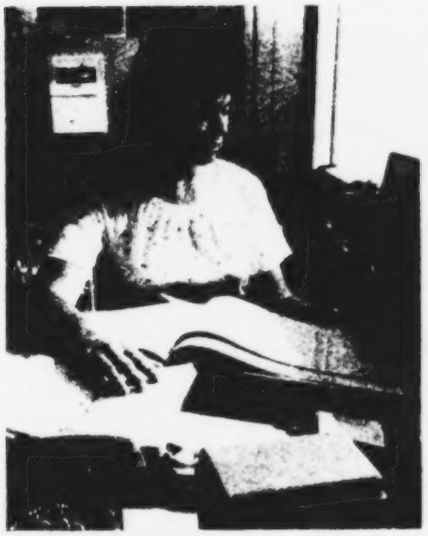
As the ratio of export change to wheat price support changes rises to 3 times current indications, the per-bushel cost of a wheat marketing loan program drops below current market prices. In contrast, even if the ratios for corn and soybeans are assumed to be more than four times this season's indications, the per-bushel net costs would still remain above current market prices.

Thus, a marketing loan program could be more cost-effective for wheat than for corn and soybeans. The ratio of the current marketing-year forecast for exports to new-crop grain eligible for subsidy is 0.63 for wheat, but only 0.21 for corn and 0.38 for soybeans. A marketing loan would lower prices paid for bushels used domestically, as well as for bushels exported. Since wheat exports account for a larger share of total use, a marketing loan subsidy would benefit wheat exports more than either corn or soybeans. *[Michael Hanthorn (202) 786-1841 and Terry Townsend (202) 786-3313]*

Upcoming Economic Reports

Summary Released	Title
December	
2	Outlook Conference Exports
3	Outlook Conference
4	Outlook Conference
10	World Ag. Supply & Demand
15	Tobacco Yearbook
16	Dairy
17	Agricultural Outlook
18	Econ. Indicators of the Farm Sector
19	Foreign Ag. Trade of the U.S.
22	Agricultural Finance

Summaries are released electronically on the dates indicated; the full reports, including tables. may also be accessed 2 to 3 days later. For details, call (301) 982-6662.



Farm Finance

Advance crop deficiency and feed grain diversion payments for 1987/88 could potentially add $1 billion to calendar 1986 direct Government payments to farmers. However, the percentage of advances actually received during 1986 will likely remain small, because of the long sign-up period, farmers' tendency to contemplate programs at length before deciding on participation, and tax considerations. A portion of these payments advanced in calendar 1986 would normally have appeared in farm income as late as calendar 1988.

Farm production expenses are expected to be down 5 percent in 1986 as both input use and prices decline. Expenses for interest, fuels, fertilizer, land rental, and seed have probably decreased the most. Substantially lower interest rates and fuel prices are saving farmers nearly $4 billion.

Interest rate and fuel cost declines also lower costs for input suppliers, ultimately leading to savings on input prices. For example, the decline in energy prices could cut farmers' fertilizer expenses $1 billion per year in 1986 and 1987. Lower input prices should reduce the prices paid index for all production inputs by 3 percent this year.

Receipts from commodities directly supported by Federal programs totaled 46 percent ($65.5 billion) of total cash receipts in 1985. With receipts from program commodities off roughly 15 percent in 1986, total cash receipts could exhibit the largest percentage decline since 1949. However, when direct payments of about $13 billion (including nearly $4 billion in marketing certificates) are combined with a $6- to $7-billion decline in cash expenses, net cash income should end up near 1985's $39.5 billion (in constant dollars). Because of higher prices, livestock farms are expected to receive 48 percent of all 1986 cash income, up from 40 percent in 1985.

Net farm income, a measure of net value of agricultural production, is expected to decline in both current and constant dollars, mainly because of less total farm output (down 5 percent) and lower prices received (down about 4 percent).

1985 INCOME DISTRIBUTION BY TYPE OF COMMODITY

Aggregate income measures do not allow ready assessment of earnings by different types of farms, such as wheat, rice, cotton, or dairy operations. Because different farm types use different production practices and make unique decisions on financing, marketing, purchasing, and Government program participation, changes in any of these will affect specific farm types differently.

In the past, USDA has relied on the Census of Agriculture, which is published every 5 years, for information on income by type of farm. Now, USDA is putting greater emphasis on its own Farm Costs and Returns Survey (FCRS).

The FCRS indicates that the distribution of crop receipts between crop and livestock farms in 1985 was almost a mirror image of 1982. Crop farms accounted for 91 percent of crop sales in both years. Enterprises such as nurseries and those growing crops such as cotton, fruit, and vegetables were even more specialized. However, the 1985 data indicate slightly higher sales of cattle and hogs on crop farms than in 1982. Dairy farms, which require specialized investments, continued to make only 2 percent of cash sales in 1985.

In 1985, crop farms received about 76 percent of direct Government payments, with livestock farms receiving

Capital Costs Rising From Tax Law Changes

Under the Tax Reform Act of 1986, the after-tax cost of using capital to purchase farm machinery should increase an average of 11 percent above costs under the current law. The cost of using capital for tractors and other long-lived equipment should be, respectively, 10.5 and 11.2 percent higher than under the existing law. Because of this, net investment in agriculture during 1986-90 will probably fall below the already negative level which is now occurring.

The tax changes will be phased in during 1986 and 1987. For 1986, the only change will be the elimination of the investment tax credit. Therefore, those assets which were eligible for the investment tax credit (all assets except multipurpose structures) will now cost about 10 percent more.

In 1987, the lower marginal tax rates and new depreciation system become effective. These two changes have offsetting effects on capital costs. The fall in marginal tax rates will increase the after-tax income generated by assets, lowering the cost of capital. However, for farmers who borrow to purchase capital equipment, a lower marginal tax rate will reduce the value of interest deductions. Nevertheless, the overall effect of the marginal tax rate reduction will be to lower the cost of using capital.

The new depreciation rates, which will be more accelerated than in the existing law, are also spread out over longer recovery periods.

Under the existing tax law, the farmer who purchased a tractor was eligible for the investment tax credit, as well as depreciation deductions taken over a 5-year period. Under the new law, the investment tax credit is repealed and the tractor must be depreciated over a 7-year period. However, depreciation deductions are larger during the early years of the 7-year period. *(James H. Hauser, James Hrubovcak (202) 786-1458, and Ron Durst 786-1290)*

Cost of Capital Under Current and New Tax Law

1986 Asset type	Cost per dollar of the purchase price: Current law	New law	Change
	Dollar		Percent
1986			
Tractors	$0.3058	$0.3356	9.71
Long-lived equipment	0.2152	0.2372	9.73
Single-purpose structures	0.0945	0.1038	9.76
Grain storage structures	0.1368	0.1502	9.74
Multipurpose structures	0.1108	0.1108	0.00
1987			
Tractors	$0.3058	$0.3337	9.09
Long-lived equipment	0.2162	0.2368	9.52
Single-purpose structures	0.0945	0.1058	11.90
Grain storage structures	0.1368	0.1912	10.92
Multipurpose structures	0.1108	0.1105	-0.15

*Capital costs are normalized on asset prices. Inflation rate is assumed to be 5 percent in both 1986 and 1987. The nominal before-tax interest rate is assumed constant for both years. Asset prices are also assumed to be constant. The capacity of assets is also assumed to depreciate at a rate equal to the 200 percent declining balance method.

Machinery Depreciation Under Current and New Law

Year	Percent of asset cost: Old ACRS	New ACRS	Actual deduction: Old ACRS	New ACRS
1	15*	14	$3,000	$2,800
2	22	25	4,400	5,000
3	21	17	4,200	3,400
4	21	13	4,200	2,600
5	21	9	4,200	1,800
6	—	9	—	1,800
7	—	9	—	1,800
8	—	4	—	800

*Eight-percent tax credit is also available in year 1.

the remainder. As expected, cash grain farms received the largest share of program payments, about 62 percent, while cotton farms received 10 percent.

Among livestock farms, cattle, hog and sheep operations received about 14 percent of all Government payments, while dairy farms received about 9 percent. In view of increasing Government crop payments to agriculture, it is not surprising that livestock producers who also grow crops are participating in crop commodity programs.

Just as crop farms had a larger share of livestock receipts in 1985 than in 1982, they also had larger shares of feed expenses and livestock purchased for resale. But, the distribution of seed, fertilizer, energy, labor, and custom work expenses between crop and livestock farms in 1985 was nearly identical to that reported by the Census for 1982. The 1985 survey data indicate that crop farms had 75 percent of the rental expenses, primarily for land, and 50 percent of property taxes. Interest expenses tended to be evenly distributed among crop and livestock farms. *[Jim Johnson and Mary Ahearn (202) 786-1807]*

INCOME BY TYPE OF FARM

The 1985 Farm Costs and Returns Survey and the U.S. aggregate farm income and expense estimates were used to develop estimates of 1985 income for all crop, all livestock, and nine specific farm types. The 1986 forecasts of U.S. income and expenses (and their components) and the 1985 distributions of income by type of farm from the FCRS were used to develop the 1986 projections for each farm type.

Crop farms.—In 1985, crop farms' cash receipts totaled $72.8 billion, over one-half of the $142 billion for all farms. However, crop farms took three-quarters of the $7.7 billion in Government payments. Crop farms had cash income of $26.7 billion, about 60 percent of total cash income. Cash income for the 965,000 farms producing primarily crops averaged $27,000 per farm.

Net cash income is expected to fall to approximately $25,000 per farm in 1986, because of a 13-percent decline in cash receipts. Government payments to crop farms will rise more than 60 percent, cushioning the fall in commodity prices. Lower expenses should save crop farms more than $3 billion in 1986.

Net cash income is projected to be down over 2 billion for cash grain farms. Lower production and prices for all major cash grains have been more than offset by a $2-billion drop in cash expenses and a $3-billion gain in Government payments. Direct payments to participants in the 1986 corn, wheat, sorghum, and barley programs increased 106, 66, 97, and 126 percent, respectively. Cash grain operations have received more than $13,000 per farm in Government payments in 1986.

Net cash income is decreasing about $4,000 per cash grain farm in 1986, and about $5,000 per tobacco and cotton operation. Lower production and prices for cotton and tobacco were offset by Government payments of more than $9,000 per farm in 1986.

Income per vegetable, fruit, and nut farm is forecast up slightly in 1986, and nursery and greenhouse incomes are projected to increase more than a tenth. These farms are the only crop category to experience higher income in 1986. The larger size of these specialized operations has continued to generate much higher net cash income per farm than among the more traditional cash grain, cotton, and tobacco operations.

The overall decline in 1986 crop-farm cash incomes is not unusual given the wide fluctuations that often occur in agricultural incomes. However, the magnitude of the underlying factors—principally large price declines, large expense declines, and offsetting large increases in Government payments—is much greater than has been typical in the 1980's.

Distribution of Production Expenses Between Crop and Livestock Farms

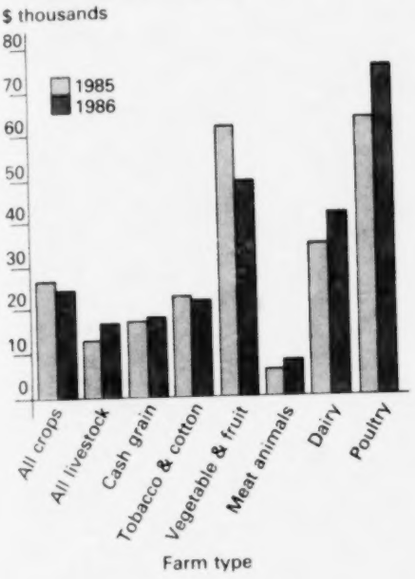
	Crop farms		Livestock farms	
	1985 FCRS	1982 Census	1985 FCRS	1982 Census
	Percent			
INCOME FROM				
Crop cash receipts	90.6	90.6	9.4	9.4
Grain	87.0	86.8	13.0	13.2
Cotton	98.1	98.1	1.9	1.9
Vegetables	98.0	98.1	2.0	1.9
Fruit	98.9	98.9	1.1	1.1
Nursery	99.9	99.8	0.1	0.2
Livestock cash receipts	9.3	6.8	90.7	93.2
Cattle	12.6	9.3	87.4	90.7
Hogs	17.9	14.1	82.1	85.9
Dairy	2.1	1.5	97.9	98.5
Government payments	75.8	NA	24.2	NA
Machine hire/ custom work	68.7	71.0	31.3	29.0
Other farm-related	14.9	NA	85.1	NA
EXPENSES FOR				
Livestock purchased	11.5	6.9	88.5	93.1
Feed purchased	8.1	4.9	91.9	95.1
Seeds	76.5	75.5	23.5	24.5
Fertilizer	71.3	72.5	28.7	27.5
Chemicals	78.6	83.1	21.4	16.9
Energy & petroleum	58.6	59.8	41.4	40.2
Hired labor	60.1	64.5	39.9	35.5
Custom work	70.2	70.3	29.8	29.7
Rent	75.1	NA	24.9	NA
Real estate interest	52.4	NA	47.6	NA
Non-real estate interest	50.6	NA	49.4	NA
Property tax	50.2	NA	49.8	NA
Total	47.5	NA	52.5	NA
Farm numbers	42.4	46.0	57.6	54.0

1/ FCRS = USDA's Farm Costs and Returns Survey. NA = Not applicable.

Livestock farms.—Returns to the livestock sector are improving in 1986. The ratio of livestock to crop net cash income per farm illustrates this turn around: the ratio increased from 48 to 66 percent between 1985 and 1986, propelled by a 20-percent increase in net cash incomes of livestock farms.

Cash receipts and gross cash income are strengthening for the livestock sector because of price increases for cattle and hogs and record production in dairy and poultry. Government payment levels on beef, hog, and sheep operations that also grow grain will increase to $1.0-$2.0 billion in 1986 (from $1.2 billion in 1985), becoming an important component of livestock producers' cash income. Declines in cash expenses are projected to occur for every livestock type, also providing an important income boost.

Net Cash Income Rising on Livestock Farms, Falling on Crop Farms



More than 1.3 million farms raised primarily livestock in 1985, and they averaged about $13,200 in cash income each. Higher prices, production, and Government payments, combined with lower expenses, will increase average livestock farm incomes to more than $16,000 in 1986. This 24-percent gain is one of the largest in recent years, and will provide substantial relief to beef, hogs, sheep, and "other livestock" farms. Per-farm income gains for dairy and poultry should be near 20 percent as well. *[Richard Kodl and Greg Hanson (202) 786-1804]*

SPECIALIZED FARMS' NET RETURNS IN 1985

This article compares the before-tax business profitability of five specialized farming operations[1], using different net returns concepts, for major production regions of the country. It is based on calendar 1985 data from the Farm Costs and Returns Survey. In-kind farm housing income and income tax effects are ignored.

Farms are unique in that they are businesses that usually provide a residence for the proprietor. About 80 percent of farm operators reside on their farms. Along with the business returns from commodity production, the in-kind income from farm housing is an important return to closely held farm family businesses.

The importance of this in-kind income, as well as the high economic and social costs of relocating, helps explain why farm households may be willing to continue farming through periods of very low business returns. Quite often business and household needs for cash are met with off-farm income. Not only do most farm households receive some off-farm income, but the majority earn more off their farms than on.

Major variations in farm accounting come from differences in (1) the consumption of farm capital, (2) the treatment of inventories, (3) the farm income and expenses generated by the farm household as separate from the farm business, and (4) the paid and unpaid labor and management time of the farm household in the farm business.

In calculating net returns for specialized farms, the net returns concept excludes depreciation but includes actual capital expenditures; includes the value of crops produced in 1985 but not sold; excludes all farm household items; and includes net returns both with and without an imputation for the expense of unpaid operator and household farm labor. (See the accompanying box for a comparison of this concept with the standard USDA farm income concepts.)

Average net returns for a particular commodity will be affected by the farm structure typical for that commodity. For example, rice production is concentrated on fewer and larger farms than dairy production, which occurs on all sizes of farms. The greater the investment in productive capacity per farm, the greater the expected returns, other things being equal.

Survey data are not sufficient to permit an analysis of returns by size classes for the five farm types. However, the proportion of operations with positive net returns in 1985 is also reported to provide an indicator of profitability, although it does not take size into account.

Wheat farms.—Wheat production is largely concentrated in three regions of the country: the Central, North Central, and Northwestern. Kansas, Oklahoma, Texas, Colorado, and Nebraska—the Central States—account for about 40 percent of U.S. wheat production. Almost three-quarters of the wheat farms in this region had positive net returns in 1985. Net returns for all specialized wheat operations in this region averaged $25,071 per farm.

The more northern Central States (North Dakota, South Dakota, Montana, and Wyoming) had a slightly lower average return, but a higher percentage of operations earned positive net returns.

The Northwestern wheat-producing area—made up of Washington, Oregon, and Idaho—accounted for only about 12 percent of U.S. production. Farms here had the highest average return of the three wheat regions, $29,696 per farm, but the lowest proportion of operations with positive net returns. The Northwestern wheat region includes more large operations than the other two, thereby raising the average return for the region.

When an imputation is made for the labor expense represented by the operators' and household members' work on the farm, the rankings of average net returns by region do not change, although the proportions of positive net returns are all considerably lower.

Rice farms.—Texas and the Delta States (Arkansas, Louisiana, and Mississippi) produce about 86 percent of U.S. rice. Three-quarters of the rice producers in this area are specialized farms (having $40,000 worth of production and the majority from rice).

[1]Specialized farms are defined in this analysis as having production value of $40,000 or more, and more than half of their production in one commodity (with one exception: corn and soybean production were combined because they are commonly jointly produced). The smaller farms are eliminated because they are more likely to receive most of their farm income as the imputed rental value of their farm dwelling. The proportion of production accounted for by specialized farms varies by commodity. In general, dairy, cotton, and rice production is more concentrated on specialized farms than wheat or corn-soybean production.

Farm Production by Region and Crop, 1985

Commodity and production region	Regions' share of U.S. sales	Specialized farms' share of regional production	Net returns: Without imputation for own labor — Average*	Without imputation for own labor — Percent with positive returns	With imputation for own labor — Average*	With imputation for own labor — Percent with positive returns
	Percent		Dollars	Percent	Dollars	Percent
Wheat						
Northwest (Idaho, Oreg., Wash.)	11.9	64.7	[illegible]	71.7	14,768	58.4
Northwest Central (Mont., N. Dak., S. Dak., Wyo.)	21.7	41.9	[illegible]	80.2	7,893	57.6
Mid and South Central (Colo., Kans., Nebr., Okla., Tex.)	48.6	41.0	[illegible]	93.8	11,926	65.4
Rice						
Delta and Texas (Ariz., La., Miss., Tex.)	86.1	74.8	[illegible]	75.8	40,466	66.3
Corn/soybeans						
Lake States (Mich., Minn., Wis.)	11.6	49.2	[illegible]	75.7	2,537	57.5
Corn Belt (Ill., Ind., Iowa, Mo., Ohio)	36.4	71.8	[illegible]	[illegible]	32,931	78.6
N. Plains (Kans., Nebr., N. Dak., S. Dak.)	12.6	58.9	[illegible]	[illegible]	22,751	74.3
Appalachia (Ky., N.C., Tenn., Va., W. Va.)	3.9	44.3	[illegible]	67.5	9,276	62.3
Southeast (Ala., Fla., Ga., S.C.)	2.9	36.9	[illegible]	63.9	-5,895	27.9
Delta (Ariz., La., Miss.)	4.8	86.0	[illegible]	78.6	18,237	73.5
Cotton						
Delta and S. Plains (Ariz., La., Miss., Okla., Tex.)	92.0	83.9	45,213	72.7	30,668	61.5
Dairy						
Northeast (Conn., Del., Maine, Md., Mass., N.H., N.J., N.Y., Pa., R.I., Vt.)	20.5	95.0	[illegible]	85.8	1,838	40.9
Lake States (Mich., Minn., Wis.)	27.7	87.3	[illegible]	85.3	-752	49.5
Corn Belt (Ill., Ind., Iowa, Mo., Ohio)	11.6	78.4	[illegible]	75.7	-328	44.0
N. Plains (Kans., Nebr., N. Dak., S. Dak.)	3.7	67.0	[illegible]	86.4	4,902	64.6
Appalachia (Ky., N.C., Tenn., Va., W. Va.)	6.2	91.8	[illegible]	77.8	-8,049	47.5
Southeast (Ala., Fla., Ga., S.C.)	3.8	96.4	[illegible]	73.1	34,294	63.7
Delta (Ariz., La., Miss.)	2.0	91.9	[illegible]	39.0	-18,328	27.0
S. Plains (Okla., Tex.)	3.9	93.8	[illegible]	55.2	-12,773	39.6
Mountain (Ariz., Colo., Idaho, Mo., Nev., N. Mex., Utah, Wyo.)	5.5	92.8	[illegible]	72.7	-2,064	54.5
Pacific (Calif., Oreg., Wash.)	15.0	98.9	[illegible]	75.4	22,558	56.3

*The average net returns are for all farms, not just those with a positive net return.
Source: Farm Costs and Returns Survey, 1985.

Farm Income Concepts Vary

Net returns not including unpaid household labor are calculated as:

Gross Income
Value of crop production (less that fed to livestock)
Livestock sales

minus

Fuel, electricity
Direct Government payments
Other farm-related cash income
Value of farm production consumed on farms
Farm wages paid to operator & household

minus

Business expenditures

Feed, livestock, seed
Fertilizer, lime, pesticides

Cash labor expenses
Interest, rent, taxes

Other cash production expenses

Capital expenditures

This concept is intended to provide a measure of business profitability. Therefore, the cash expenses and rental value of the farm dwellings are excluded.

The value of inventory change is included implicitly for crops because total crop production is valued. However, for livestock, only sales data are available from the Farm Costs and Returns Survey. For this reason, net returns are not reported here for any livestock operations other than dairy.

Survey data also do not permit the calculation of depreciation of the farm machinery and buildings used up during production. Therefore, capital expenditures which are reported on the survey are used in lieu of an estimate of capital consumption. For the sector as a whole in 1985, depreciation was about 75 percent greater than capital expenditures ($17.5 billion compared with $10.1 billion).

Net returns including unpaid labor are calculated by imputing an expense for the unpaid hours that operators and their household members work on their farms and subtracting this from the first net income estimate. This is done because a farm household's time has a value equal to the wages that members could earn in other activities. Unpaid operator and household time is conservatively valued at the average wage rate for farm laborers.

The standard USDA farm income concepts—net farm income, net cash income, net cash flow, and net business income—differ from the net returns concept used here. They have many of the same individual gross income and expense items in common, such as all gross cash farm income and cash business expenses. However, they differ in several important respects, as detailed:

Major Differences Among USDA's Farm Income Concepts

Item	Net farm income (includes depreciation expenses)	Net cash income	Net cash flow (includes capital expenditures)	Net business income (includes depreciation expenses)
Treatment of farm capital				
Value of the change in inventories	Included	Excluded	Excluded	Excluded
Farm household accounts	Included	Excluded	Excluded	Excluded
Noncash items	Included	Excluded	Excluded	Excluded except depreciation
1985 U.S. estimate (bil.)	$30.3	$44.8	$27.1	$26.4

On average, net returns for rice producers were a relatively high $53,447 per farm in 1985. Even when an imputation is make for unpaid labor hours, net returns averaged over $40,000.

Corn and soybean farms.—Over half of U.S. corn and soybean production combined comes from the Corn Belt (Illinois, Iowa, Indiana, Ohio, and Missouri). The Corn Belt had the highest average per-farm net return of all regions for 1985, both with and without an imputation for unpaid household labor. The Corn Belt also had the largest percentage of operations with positive net returns—not only the largest of all corn-soybean regions, but also of all regions for wheat, rice, cotton, and dairy operations.

Corn and soybean farms in the Northern Plains States had a relatively high average net return as well, $38,739 per operation. The Southeast had the lowest return for all corn-soybean regions, $9,805. Including an imputation for unpaid labor, the average returns for corn-soybean operations in the Southeast were negative.

The survey data permit a statistically reliable analysis of corn-soybean farms by size for the Corn Belt region. Farm size is measured by the value of total production. About 1.5 percent of corn-soybean farms in the Corn Belt have production valued at more than $500,000, and the rest of the farms are about evenly split between the other two size categories of $40,000-$99,999 and

Value and Share of Production for Three Sizes of Corn-Soybean Farm in the Corn Belt, 1985

	Value of total production		
	$40,000 - $99,999	$100,000 - $499,999	$500,000 or more
Share of region's farms (%)	48.8	49.7	1.5
Share of region's corn-soybean production (%)	22.6	68.4	9.0
Net returns before labor imputation			
Average ($)	$22,772	$63,908	$169,741
Percent with positive net returns	89.0	89.8	85.0
Net returns after labor imputation			
Average ($)	$12,370	$48,795	$152,906
Percent with positive net returns	75.6	81.5	83.6

$100,000-$499,999. As expected, the largest farms account for a disproportionately big share of production, 9 percent, compared with 68.4 percent for the mid-sized, and 22.6 percent for the smaller size class.

As farm size increases so does average net return. Before a computation is made for unpaid labor, the percent of farms with positive net returns is very similar among size classes. The largest farms had the lowest percentage of farms with positive net returns—85 percent. However, because a greater share of the labor on the largest farms is paid, when an imputation is made for unpaid labor expenses, the largest farms have the highest percent of farms with positive net returns, 83.6 percent.

Cotton farms.—About half of all U.S. cotton production occurs in the Delta States (Mississippi, Louisiana, and Arkansas) and the Southern Plains (Texas and Oklahoma). For statistical reasons, the samples for these two regions were combined. The average returns on specialized cotton farms were $45,213 per farm. Over 70 percent of producers earned a positive net return. California and Arizona are also major cotton-producing States but again, because of sample size restrictions, estimates are not available for them.

Dairy farms.—Although dairy production occurs in every region of the country, the majority is in the Lake States, the Northeast (especially New York and Pennsylvania), and the Pacific region. The average net returns per farm in the Lake States were $22,572; in the Northeast, $24,539; and in the Pacific region, over $40,000. The Southeast led with $57,276. However, a high percentage of dairy farms in the Southeast are large operations. Nevertheless, the Pacific region had twice as high a proportion of large farms as the Southeast and yet had a lower net return.

Because dairy production requires more labor than most other types of operations, the differences between net returns before and after factoring in unpaid labor expenses are greater than for the other farm types. In fact, after unpaid labor imputations are made, only the Southeast, the Pacific, the Northern Plains, and the Northeast had positive average net returns. *[Mary Ahearn (202) 786-1801]*

Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the January *Agricultural Outlook* comes off press.

December

1 Egg Products
4 Dairy Products
Poultry Slaughter
5 Celery
10 Crop Production
12 Turkey Hatchery
Milk Production
15 Potato Stocks
Cattle on Feed
19 Catfish
22 Hogs & Pigs
Livestock Slaughter
Cold Storage
23 Eggs, Chickens, & Turkeys
29 Peanut Stocks & Processing
30 Vegetables - Preliminary
31 Agricultural Prices

The Roller Coaster Ride of the Input Industries, 1975-1985

The agricultural input industries, like farming, are in transition. Over the last several years, the farm chemical, machinery, and fertilizer industries have had to contend with declines in domestic planted acreage as well as financial stress within the farm sector.

The fertilizer and farm machinery industries appear to be facing the greatest pressures, as revealed by their extensive industry reorganizations. On a lesser scale, the U.S. farm chemicals industry is undergoing changes, but export demand for pesticides and the industry's pricing structure may have mitigated the effects of the farm sector's woes.

In 1985, U.S. farmers spent nearly $21 billion, or almost 20 percent of all farm cash expenditures, on manufactured inputs, and another $10 billion on capital items. The prices and quantities of manufactured inputs purchased are major influences on net farm income which is determined by subtracting farm expenditures from cash receipts.

The seed, fertilizer, farm machinery, and pesticide industries are largely responsible for developing and encouraging the adoption of new technology. Productivity gains for farmers, and eventually cheaper food for consumers, are fostered by new and improved machinery, services, and products. Furthermore, increased productivity enhances the U.S. position vis-a-vis foreign agricultural competitors. Unfortunately, greater reliance on purchased or nonfarm inputs leaves agriculture more vulnerable to outside influences, such as during the energy crisis of the 1970's and the agricultural credit crunch of the 1980's.

Input Indicators

Indicator	Average of annual changes 1975-81	1982-85
	Percent	
Agricultural exports (value)	11.1	-7.8
Planted acres (1982-85)		
Corn	1.2	0 1/
Cotton	2.1	-4.8
Soybeans	4.0	-1.6
Wheat	3.5	-3.9
Other crops	-0.3	-0.4
Total principal crops	1.6	-1.8
Irrigated acres 2/	3.2	0.3
Index of crop prices received	2.2	-2.2
Index of prod. items prices paid	8.6	0.7
Per acre land values index	13.0	-5.0
Farm sector equity	12.1	-8.1
Real FCA interest rates 3/	1.3	10.5
Net cash farm income (nominal)	-0.1	7.8
Total agricultural debt		
Real estate	13.3	0.1
Non-real estate (excludes CCC)	13.3	-0.2

1/ Less than 0.5 percent. 2/ Estimated. 3/ Average rate, not percent change. Production Credit Association rate deflated by Producer Price Index.

Changes in agricultural production are quickly transmitted to the input industries. Planted acreage is perhaps the most critical factor in determining total consumption of fertilizer, pesticides, and seed. Durable inputs, such as farm machinery, are consumed over several years. Hence, decisions on them are often postponable and are more heavily influenced by such factors as a producer's farm equity position, farm income, and interest rates.

In 1970's, Growing Exports and Acreage Encouraged Input Industries To Expand

The expansion of agricultural production during the 1970's and the subsequent contraction during the 1980's largely explain the current plight of the input sector. Spurred by record export growth from 1975 through 1981, planted acreage of the principal crops increased an average of 1.6 percent per year. Input-intensive corn acres grew an average of 1.2 percent per year from 1975 though 1981. During the same time, wheat, cotton, and soybean acreage grew from 2 to 4 percent annually.

Irrigated acres, another indicator of intensive input use, grew over 3 percent annually during the 7-year period. Crop prices received by farmers were increasing an average of 2.2 percent per year. In conjunction with the economy-wide inflation of the late 1970's, the expanding agricultural sector absorbed input price rises of nearly 9 percent an-

nually during 1975-1981. Nominal land values rose 13 percent annually, and lenders were liberally financing the growth of real estate and other farm debt.

In sum, the 1970's gave the input industries signals to add capacity and employment, and in some cases the signals were reinforced by growth in the export market for inputs.

In the 1980's, Less Acreage, Higher Interest Hurt Input Manufacturers

Despite some spectacular gains in net cash farm income, primarily from Government programs and reduced production costs, 1982-85 brought reversals in agriculture. Exports dropped off, land values began falling at rates not seen since the 1930's, and prices received by farmers declined over 2 percent annually.

Average planted acreage decreased 1.8 percent per year between 1982 and 1985. Furthermore, 1983's PIK program, announced early in the year, idled nearly 60 million acres. By the time the program was announced, input production for 1983 was well underway and manufacturers and distributors were burdened with large inventories.

Trends in the U.S. capital markets in the early eighties brought changes in demand for durable goods, such as farm machinery. The low and sometimes negative real interest rates of the 1970's had given way to very high rates by 1981. Steep real interest rates, along with declining farm equity, led farmers to reduce real and non-real estate debt with their record cash farm income. Consequently, durable goods purchases fell dramatically.

After 40 Years of Expansion, Fertilizer Use Began Falling in 1982

U.S. plant nutrient use peaked in 1981 at 23.7 million tons, ending an almost continuous 40-year expansion. Lower acreage since 1981 has led to a drop in overall domestic fertilizer use. Application rates also have affected total fertilizer use. Application of some nutrients has begun to grow more slowly, and application rates have actually declined for some fertilizers.

Higher yielding crop varieties, more irrigated acres, and improved cultural practices have increased the potential for higher crop yields and created additional demand for fertilizer. However, the yield gain from an additional application of fertilizer is generally smaller than the increase from an initial application, which means farmers are approaching optimal per-acre application rates given input and output prices.

In the case of nitrogen, diminishing economic incentives slowed the growth in application rates during the late 1970's and early 1980's. For corn, phosphate and potash fertilizer application rates have actually declined since 1981.

Government acreage reduction programs, especially for corn, foster lower fertilizer prices as farmers demand less fertilizer and dealers lower prices to stimulate sales. This cycle has been the nemesis of the fertilizer industry, leading to excessive inventories, reduced production and profits, and the closing of fertilizer plants.

Fertilizer indicators

Indicator	Average of annual changes 1975-81	1982-85
	Percent	
Consumption	5.9	0
Nitrogen	3.5	-3.1
Phosphate	6.3	-2.5
Potash		
Prices paid index, fertilizer	4.5	-1.5
Fertilizer expend. by farmers	7.2	-1.3
Natural gas costs	27.9 1/	3.8
Industry employment 2/	1.8	-9.6 3/
Industry capital expenditures 4/	13.6	-25.5 3/
Fertilizer appl. per acre (corn)	2.3	1.0
Nitrogen	3.5	-3.8
Phosphate	4.8	-2.0
Potash		

1/ 1976-81. 2/ Standard Industrial Classifications (SIC) 1475, 2873, 2874, and 2875. 3/ 1982-84. 4/ SIC 2873, 2874, and 2875.

In the last decade, the United States has become less competitive in the world fertilizer market. The energy price jumps during 1972-74 and 1979-82 raised production costs for U.S. nitrogen fertilizer producers, because they use large amounts of natural gas in the production process.

Consequently, in the 1980's nitrogen fertilizer imports increased as the value of the dollar grew relative to other currencies. Lower priced imports replaced U.S. products, forcing the U.S. nitrogen fertilizer industry to close high-cost production facilities.

The U.S. potash industry faced a similar situation. Potash imports have increased and exports have declined, resulting in the closing of U.S. potash mines.

Since the U.S. phosphate fertilizer industry is one of the world's low-cost producers, the problem of stagnating U.S. sales in the late 1970's was solved by increasing exports. However, the U.S. industry is now being challenged by Morocco, Tunisia, Jordan, and other countries.

U.S. Farm Machinery Industry Concentrated on Larger Tractors

The 1970's were an optimistic but transitional decade for the farm machinery industry. The favorable economic environment fostered a switch to large equipment, here and abroad. Consequently, equipment exports, industry investment, and the U.S. farm machinery trade surplus grew rapidly. Production of small tractors (under-40 hp) was increasingly left to the Japanese, while production of medium-size tractors (40-99 hp) was moved primarily to European plants of U.S. multinational firms.

North American tractor manufacturers continued to specialize in larger two-wheel and four-wheel-drive vehicles. Through the 1970's, price increases plus the shift toward

Farm Machinery Indicators

Indicator	Average of annual changes 1965-81	1982-85
	Percent	
Farm machinery shipments	11.7	-1.9
Wheel tractors	11.0	-14.6
Crop production equipment	9.0	-0.7
Livestock equipment		
Farm machinery expenditure (new & used)	6.0	-13.0
Prices paid index, tractors and self-propelled machines	12.3	6.0
Unit sales		
Greater than 40-hp two-wheel-drive tractors	-4.7	-12.0
4-wheel-drive tractors	3.9	-26.0
Self-propelled combines	-1.7	-24.0
Industry employment 1/	-1.7	-11.3 2/
Industry capital expenditures 1/	16.8	-27.4 2/
U.S. trade balance in farm machinery	56.4	-30.9

1/ Standard Industrial Classification 3523.
2/ 1982-84.

larger machines generated a 6-percent annual expenditure increase for new and used tractors and farm equipment, reaching a record $11.7 billion in 1979.

The early 1980's brought a dramatic turnaround in the industry—farm machinery expenditures declined 13 percent annually. Manufacturers' shipments of all types of machinery declined, as unit purchases of new equipment dropped precipitously. At the same time, imports from Japan and Western Europe (including those from U.S.-owned plants) began to narrow the U.S. farm machinery trade surplus and add further pressure to strictly domestic manufacturers.

Furthermore, the increased capacity and quality of some new U.S.-produced equipment, such as tractors and self-propelled combines, meant that the unit sales levels of the 1970's would not be matched in the early 1980's.

In response to declining demand, increased imports, and continuing shifts of manufacturing overseas, the U.S. industry's employment dropped more than 11 percent per year after 1981. New capital expenditures in the industry declined, on average, 27 percent annually. These factors forced major reorganizations within and between companies, as the industry worldwide adjusted to declining demand.

Pesticide Indicators

Indicator	Average of annual changes 1975-81	1982-85
	Percent	
Composite price index	NA	-2.3
Herbicides	NA	1.1
Insecticides		
Industry employment 1/	4.0	-3.7 2/
Industry capital expenditures 1/	19.9	1.5 2/

NA = not available. 1/ Standard Industrial Classification 2879. 2/ 1982-84.

Lower Acreage Cut Pesticide Use

The chemical industry in general and the pesticide subsector in particular are characterized by heavy emphasis on research and development (R&D). Patent protection, the rapid adoption of new products derived from R&D, pest resistance, and environmental and health concerns all encourage efforts to devise new herbicides, insecticides, and fungicides.

Farmers worldwide continue to adopt these chemical products—the more traditional pest control methods, such as crop rotation, hand weeding, and mechanical cultivation, are being deemphasized. However, in recognition of pesticides' sometimes detrimental effects on humans and the environment, they have become agriculture's most regulated input.

Like other input industries, pesticide producers and distributors enjoyed growing markets during the 1970's and early 1980's. Not only were acres planted increasing, but the share of the major crops treated with pesticides grew. In 1970, about 80 percent of corn and cotton acres and nearly 70 percent of soybean acres were treated with herbicides. By the early 1980's, nearly 95 percent of the corn, cotton, and soybean acres were treated. However, insecticide use, which depends on infestation severity and is more sparing than use of herbicides, has remained nearly constant since the early 1970's.

Like fertilizer and machinery sales, pesticide manufacturers' domestic sales dropped after 1981. The decline in planted acreage resulted in less pesticide use. Meanwhile pesticide prices generally remained unchanged or declined slightly.

Despite patent protection for some products, decreased demand has constrained prices, leaving total industry sales consistently below 1981 levels. However, materials protected by patents and with little or no competition may be able to maintain their prices and help recoup the extensive R&D costs of new product development, testing, and registration (see *Agricultural Outlook*, October 1986).

Overall, pesticide manufacturers have weathered the agricultural downturn better than the other input industries. For example, employment in the industry, while declining

between 1982 and 1985, has not matched the falloffs of other input industries. The rate of capital expenditures in the industry slowed between 1982 and 1985, but did not drop off as it did with the other input industries. New capital expenditures were needed to produce an array of new pesticide products and to minimize environmental risks at manufacturing sites.

The U.S. pesticide industry has also enjoyed a growing export trade. While several other U.S. inputs are moving toward a negative trade balance, pesticide exports have increased faster than imports since 1981, partly because of the United States' extensive R&D facilities and efficient, specialized plants. Furthermore, the U.S. industry's share of world trade in pest-control products has remained roughly constant over the last 10 years.

Inputs Industry Also Faces Environmental and Health Issues

A number of environmental and health issues face the input industries and may lead to restrictions on input use. For example, evidence is mounting that intensive fertilizer and pesticide use has caused at least local contamination of aquifers. Iowa and Nebraska have issued drinking water standards for specific chemicals.

The new Federal legislation covering pesticide re-registration not only recognizes the drinking water problem, but also addresses the safe handling of pesticides, and the residues allowable in domestic and imported food. In addition, new machines or tillage practices may be required to minimize soil erosion and chemical runoff.

Agricultural Policy Alters Input Use

Government programs have traditionally focused on acreage reduction as a way of cutting output when large surpluses accumulate. Historically, reducing planted acreage 10 percent reduced input use by 6 percent. Inputs were not reduced by the full 10 percent because typically farmers idled their less productive less intensively farmed land. In addition, farmers often boost input use on the remaining planted acres in response to less uncertain, and often higher, commodity prices.

However, the 1985 Farm Act may eventually lead to reduced per-acre input use, for two reasons:

- program yields[1] have been frozen, ending the incentive to increase yields solely to increase future deficiency payments, and
- the commodity loan rate—the additional revenue realized by participating farmers for each additional bushel or pound produced—was reduced for 1986. The Farm Act allows for further support price reductions through 1990. On the other hand, expected input price declines will tend to offset input use reductions encouraged by lower commodity prices.

[1]Farm program yields for crop years 1986 and 1987 are the average yields on a farm during 1981-85 excluding the high and low years.

While farmers are compensated for reducing their production and sales, the input industries are not. However, two Government actions have at least acknowledged the effects of major acreage reductions on input suppliers. In the first, a Small Business Administration program was established in response to PIK. The program allowed small- to medium-sized input manufacturers or distributors suffering severe economic hardship because of the PIK program to receive low-interest recovery loans.

The second action, in the 1985 Farm Act, mandates that the total acres diverted in any county must be limited so as not to hurt the local economy. Hence, local input suppliers are protected from a massive loss in sales.

Neither a low-interest loan nor acreage base protection prevents economic hardship or even bankruptcy among input industries. However, the new Farm Act mandates early announcement of farm program provisions, which should allow input manufacturers to make a more orderly preparation for the upcoming planting season.

Outlook Continues Cloudy

In retrospect, increased demand for domestic agricultural inputs in the 1970's encouraged many of the affected industries to overexpand. Many industries added capacity, employment, and inventory in anticipation of long-term demand growth which did not materialize. The result was that many industries had to contract during the 1980's.

The short-term outlook is for continued build-up of agricultural stocks, and perhaps only modest revival of foreign demand. This outlook suggests that capital and labor will continue being encouraged to shift out of both agriculture and the input industries. *[Stan Daberkow and Paul Andrilenas (202) 786-1456]*

How Altering Farm Production Levels Affects GNP and Employment

Natural disasters, changes in domestic or export demand, world crop shortages, and changes in Government policies are among the events that can shock the agricultural economy. These shocks can change agricultural production and its demand for production inputs. A small shock may be felt just in the agricultural sector. But, a much larger shock, involving the economic and employment patterns that link agriculture with the entire economy, may be felt throughout the U.S. economy. Analysis of the economic and employment linkages helps show how they can transmit shocks throughout the economy.

Upstream and Downstream Linkages

The farm sector is linked to the larger economy in a network of input purchases and product sales. Farms buy inputs such as equipment, supplies, feed, seed, fertilizer, labor, and financing from what can be termed "upstream" sectors. In turn, farms sell their products to "downstream" sectors which store, process, transport, manufacture, distribute, retail, consume, or export the products. For some commodities, like cotton, these chains are very long. Cotton may be ginned, spun into thread, woven into fabric, manufactured into garments, and sold in retail stores. For grain destined for storage or export, however, the chain can be short, ending with transport to a central terminal or port.

Agriculture is only one segment, not a dominating force, in this network of industries. The agricultural sector can purchase inputs and sell its own products only because there is a demand for the final products that will be made from them. The farm sector cannot unilaterally increase its output and expect to proportionally increase activity in the rest of the economy. This could occur only if agriculture were the only factor limiting the output of the economy. This has seldom, if ever, been true; agricultural production has generally been in surplus. Since the excess is normally stored by farmers or the Government, farm production can usually be cut, within limits, without proportionally reducing activity downstream.

In addition, the linkages are driven mostly by the volume of output from agriculture, not the value. Changing agricultural commodity prices without changing volume produced would not directly affect either output or employment in the rest of the economy.

Although the viewpoint of this analysis is national, local economies can be seriously affected by changes in the farm sector, depending on their specialization in farming, input supplying, or product processing.

Changes in the structure of U.S. agriculture over the last two decades have strengthened the ties between farming and the general economy. For example, purchased inputs increased from $51 billion in the early 1960's to $81 billion (in constant 1982 dollars) in the early 1980's. Also, far more value is now being added to agricultural products after they leave the farm. The value added in downstream industries rose to $440 billion (in constant 1982 dollars) in the early 1980's, from $235 billion in the early 1960's.

The Dollar Measure of Linkages

The linkages of the food and fiber system to the larger economy are shown in figure 1. The $648 billion in final consumer, export, and stock demand for farm products reported in 1984 was made up of $518 billion in downstream activities, $66 billion in on-farm activities, and $65 billion in upstream activities.

Looking at this flow so as to focus on the farm sector, $1.00 in farm activity was linked upstream to $.64 in input activity and downstream to $3.20 in further-processing activity if the product in question was ultimately consumed domestically. However, if the product was exported raw, this same $1.00 in farm activity was linked to only $.31 in downstream activity. The downstream amount was negligible if the commodity was stored by the farmer or Government as surplus.

The statement that agriculture accounts for 18 percent of the United States' GNP refers to the entire complex of agribusiness activities from the beginning to the end of the stream. Farming alone accounts for 2 percent of total GNP, while upstream activities account for another 2 percent and downstream activities for 14 percent.

Describing these same linkages in employment terms, the 21.0 million jobs involved in meeting consumer and export demand and storing surplus farm products in 1984 were comprised of 16.3 million jobs downstream, 2.7 million jobs on the farm, and 2.0 million upstream.

The accompanying table illustrates these linkages in more detail. Domestic food expenditures of $450 billion in 1984 required supporting farm-sector output[1] of $140 billion, generated nearly $44 billion of farm-sector GNP, and required nearly 2 million farm workers. Upstream industries serving this farm sector output accounted for $96 billion in total output, $54 billion in GNP, and employment of 1.7 million people.

[1]Because output measures total sales, it includes some double counting. GNP eliminates double counting of crops' value as they move downstream.

The Cost of Farm Programs: Reading the Fine Print

Price support and related outlays for program commodities cost an estimated $25.8 billion in fiscal 1986, leaving many observers wondering whether there is a less costly way to support the U.S. farm sector. Both during and after debate on the 1985 farm bill, several alternative programs were introduced featuring lower Government outlays and higher levels of support. These alternatives were rejected mainly because analysis showed them to be more costly than the Food Security Act of 1985. Yet some of the alternatives showed no direct payments made to the farm sector. How can a farm program without direct payments be more costly than one with direct payments?

For 50 years, U.S. farm policy has embraced a core objective of providing support for farm income, generally accomplished through supporting farm prices. There are two ways to raise farm prices: increasing demand for farm products or reducing supplies. What makes some farm programs more costly than others is the method of supporting farm prices. Raising farm prices by stimulating demand for commodities generally results in visible outlays, such as export subsidies. Depending on the degree of support provided, these visible outlays can become quite high.

Supporting farm prices by reducing supplies, on the other hand, appears less costly; if supplies are reduced enough, farm prices rise sufficiently that supplemental direct payments are unnecessary. But, as the article on linkages shows, the farm sector is highly dependent upon the nonfarm economy for financial and physical inputs, and on foreign markets for a substantial share of its demand. Consequently, increases in farm prices resulting from supply reductions can impose large adjustments, and hence great costs, throughout the nonfarm economy. The difference is that the costs are hidden under a supply-reducing program.

To show how this occurs, consider a comparison between the current mix of programs provided in the Food Security Act, and a farm program that tries to provide income support at nearly the same level by supply restriction alone. The article on linkages describes this second program.

The Food Security Act allows for lower farm support prices based on moving averages of past market prices, but for the first 2 years, it freezes target prices at 1985 levels. Thus, as farm prices follow the decline in loan rates, the direct payments required to make up the difference between market prices and target prices increase. Through lower price supports and additional Export Enhancement provisions, the Food Security Act helps increase demand for farm commodities. Thus, the net effect of the Food Security Act is increased demand and visibly high program outlays.

Under a large acreage reduction (LAR) program, farm prices would be increased by making commodities scarce. Higher farm prices would make direct payments unnecessary. Foreign demand under the program would decline. And, given some price-responsiveness in the domestic market, significant decreases would also occur in domestic demand.

Thus, the first hidden cost imposed by a LAR program would be that domestic consumers would pay more for less food, and the cost of farm supports would be shifted from taxpayers to consumers.

Foreign consumers would lose in two ways. First, less production would be available for export from the United States. Export prices would rise. If foreign consumers continued importing from the United States, they could do so only at higher prices.

Second, suppose importers turned elsewhere for imports. If, previous to implementing a LAR program, the United States had been a major competitor in world trade of a commodity that was now priced much higher, the prices of competing exports would tend to increase along with the U.S. price. In effect, the United States would create a price umbrella which would allow competitors to increase their prices somewhat and still capture greater shares of world trade. Thus, even if foreign consumers turned away from higher priced U.S. exports, they would likely have to pay more for imports since the overall world price would increase.

If these were all the costs of a LAR program, however, many would still consider it feasible. With food expenditures currently claiming a relatively small share of U.S. consumer expenditures—about 15 percent—some people feel that U.S. consumers do not pay their fair share for an abundant food supply. But a LAR program would be a regressive food tax, hurting low-income consumers who have less ability to accommodate food price increases.

A LAR program would have other hidden costs in addition to those imposed on domestic and foreign consumers. In fact, it would impose costs on every sector or industry with which production agriculture is linked, and even on agriculture subsectors that do not have oversupply problems—such as livestock and poultry producers. Because feed is a major component of the cost of producing beef, pork, poultry, and dairy products, producers of these products would feel the brunt of a LAR program immediately. Costs would ultimately be transferred to consumers.

A LAR program would also have swift consequences for input industries. Farmers naturally would need fewer inputs, such as seed, fertilizer, and pesticides. The industries that rely on farm demand for those inputs would have to contract. Services demanded by farmers would also decrease.

The accumulated effect of a LAR program can be measured in terms of jobs lost and reduced economic activity. Because of the linkages between agriculture and the rest of the economy, the substantially reduced volume moving through the system reduces total economic activity by about $65 billion. This is more than double the amount of direct payments made to farmers in fiscal 1986.

Furthermore, some direct payments would still occur under a LAR program. High food prices would add pressure for increasing food stamp benefits. Unemployment increases claims for unemployment benefits until alternative jobs can be found. *[Barbara Stucker (202) 786-1869]*

Downstream linkages serving domestic food demand accounted for $741 billion in total output, $331 billion in GNP, and 10.4 million jobs. Domestic food expenditures are the largest final use category. The others in descending order are nonfood agricultural products (shoes, clothing, tobacco, flowers, seeds, and potted plants), agricultural exports, and storage of agricultural stocks. Agricultural imports reduced the demand for domestic farm products by $31 billion. The farm sector and the economy can be affected very differently depending on which demand sources are affected by a shock or policy change.

Effects of Shocks

How an economic shock or policy change in agriculture reverberates throughout the economy depends on several factors:

- the strength of the linkage,
- the size of the economic shock or policy change,
- how the policy change is implemented (for example, restricting crop acreage, versus restricting total production, versus restricting marketed output), and
- the dependence of local economies on the farm sector and farm-related industries.

There is an order in which different parts of the total agricultural sector would be affected by an economic shock or policy change. Small changes would affect only storage by farmers or Government. Larger changes would start to affect farm production and input use. Still larger changes would affect exports of farm products. But, very large changes would be required to affect domestic processing, distribution, and consumption of farm products.

Similarly, small changes might have little effect on long-run farm prices, but larger changes would have progressively larger effects as more price-responsive parts of the food and agricultural system were affected. If a change or shock were large enough to be felt all the way to the domestic processing and consumption end of the agricultural complex, then farm and food prices would have increased substantially.

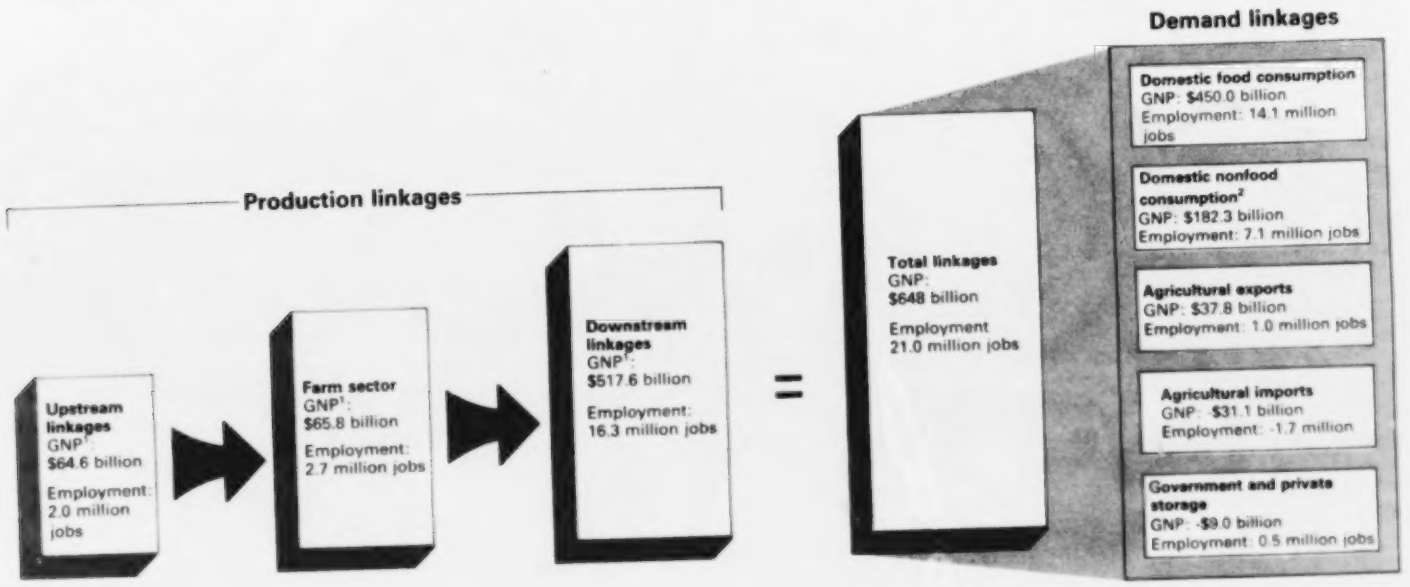
How a farm policy or program change is implemented also can modify its effects on agriculturally linked sectors. Traditionally, most commodity programs have relied on voluntary acreage reduction programs to limit the land put into production. Such programs have generally not resulted in equivalent cutbacks in other agricultural inputs.

Output, GNP, and Employment for Final Uses of Farm Products, 1984

Final use category	Upstream linkages	Farm sector	Downstream linkages	Total linkages	Demand source
Household food expenditures					
Total output ($ bil.)	96.2	140.1	740.9	NA	NA
GNP ($ bil)	54.2	43.9	331.3	429.4	450.0
Employment (1,000)	1,694.8	1,990.0	10,414.2	14,099.0	NA
Household nonfood expenditures					
Total output ($ bil.)	5.4	10.3	401.3	NA	NA
GNP ($ bil.)	3.0	4.9	205.9	231.8	182.3
Employment (1,000)	99.1	165.0	6,863.9	7,124.0	NA
Agricultural exports					
Total output ($ bil.)	15.6	29.0	37.3	NA	NA
GNP ($ bil)	8.3	13.4	16.8	38.5	37.8
Employment (1,000)	257.2	461.0	332.8	1,051.0	NA
Agricultural and apparel imports					
Total output ($ bil.)	-9.3	-14.3	-101.5	NA	NA
GNP ($ bil)	-4.9	-5.0	-40.1	-50.0	-31.10
Employment (1,000)	-153.3	-210.0	-1,375.7	-1,739.0	NA
Government and private storage					
Total output ($ bil.)	8.0	16.8	11.7	NA	NA
GNP ($ bil)	4.2	8.8	5.4	18.4	9.0
Employment (1,000)	131.9	279.0	68.1	479.0	NA
Total agricultural expenditures					
Total output ($ bil.)	115.9	181.9	1,089.9	NA	NA
GNP ($ bil)	64.8	66.0	519.3	650.1	648.0
Employment (1,000)	2,025.7	2,685.0	16,303.3	21,014.0	NA

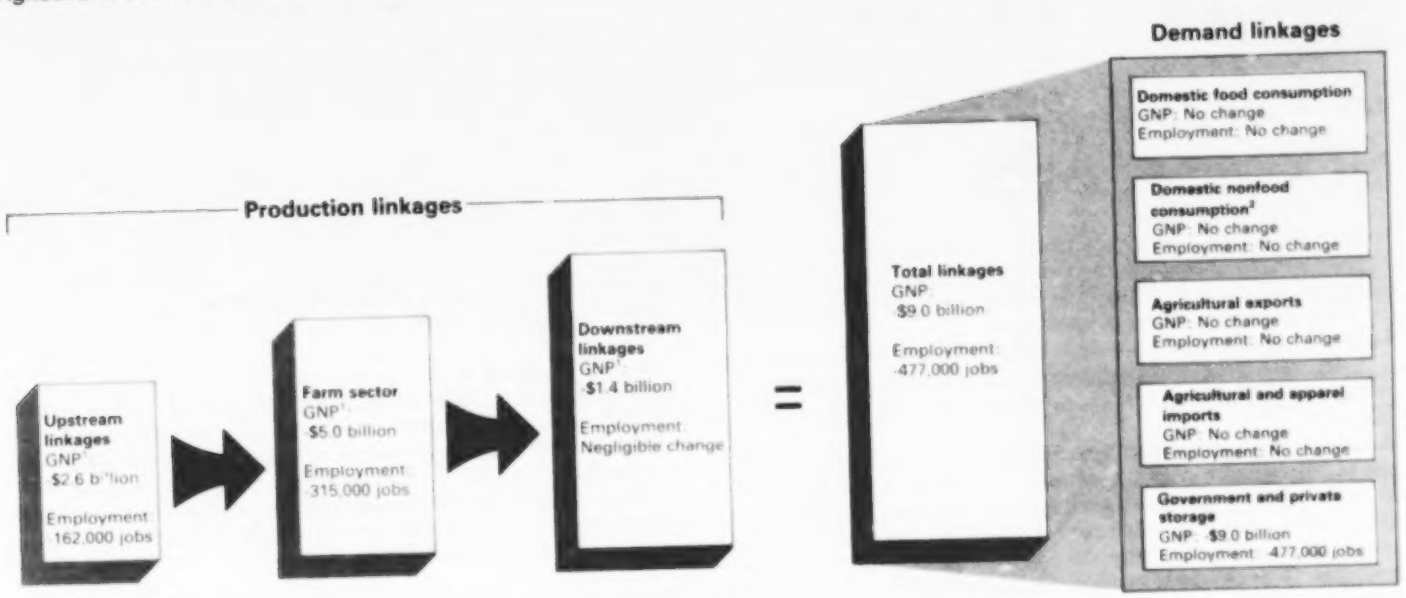
NA = Not applicable. *Total GNP and employment figures in the table are the same as those in figure 1; the small differences arise from updating prices to 1984.

Figure 1
Agricultural Sector GNP and Employment Linkages, 1984



[1]Scaled to level of demand to correct for small errors introduced in calculation.
[2]Clothing, shoes, tobacco, cut flowers, seeds, and potted plants.

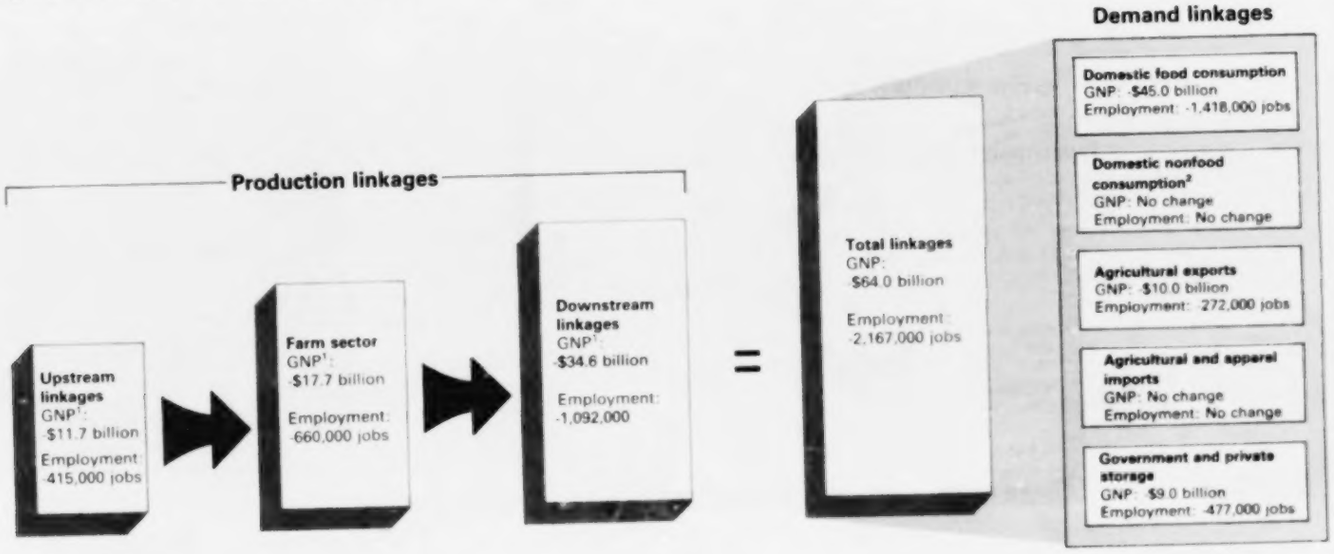
Figure 2
How a Small Acreage Reduction Program Would Change Agricultural Sector GNP and Employment



[1]Scaled to change in demand to correct for small errors introduced in calculation.
[2]Clothing, shoes, tobacco, cut flowers, seeds, and potted plants.

Figure 3

How a Large Acreage Reduction Program Would Change Agriculture Sector GNP and Employment



[1]Scaled to change in demand to correct for small errors introduced in calculation.
[2]Clothing, shoes, tobacco, cut flowers, seeds, and potted plants.

However, if a farm program change were implemented through limiting production, or limiting the amount of commodity that could be sold, as with marketing quotas or certificate programs, the effects on agricultural input use could be much larger. Farmers would tend to use purchased inputs sparingly and use more owned inputs, such as land.

Farm Program Impacts

A quick look at two policy alternatives illustrates how these linkage measures are used.

- The first alternative is a small annual acreage reduction program designed to limit accumulation of excess stocks by Government. The program leaves long-run farm prices essentially unaltered.
- The second alternative is a large permanent acreage reduction program designed to significantly raise farm commodity prices.

A reduction of 30 million acres, about 10 to 15 percent of the total program acreage, would be roughly equal to the average of the programs in effect over the last two decades. Most of the acreage reduction would come from wheat and feed grain area cuts, with smaller cuts in cotton and rice. This voluntary reduction is assumed to be implemented only to minimize excess production that would otherwise end up as Government surplus. As a result, the impact on the final demand for farm products is limited to changes in stocks.

With no changes in consumer or export demand, overall economy-wide impacts are relatively small and fall mostly on the farming and input industries. As demonstrated in figure 2, a 30-million-acre reduction would reduce final stock demand $9 billion, on-farm activities $5 billion, input industry activity $3 billion, and downstream activities $1 billion. The employment impacts of the program would be largely limited to the same industries—affecting 315,000 jobs in farming, 162,000 in input industries, and very few jobs downstream.

Alternative 2 is a 125-million-acre reduction program aimed at balancing supply and use at significantly higher commodity prices—about 80 percent of parity. Its impact would be substantially larger. It would require idling roughly 50 percent of the program acreage base and raising farm prices 30 to 40 percent above 1985/86.

The full range of economic linkages would be affected in this situation A 30- to 40-percent rise in farm prices would raise consumer food prices nearly an equivalent amount. Consumers, over time, would adjust their food purchases—buying fewer high-value products such as red meats, dairy products, and highly processed food, and substituting lower value products such as vegetables, potatoes, and grains.

Because of these food substitutions, total consumer food expenditures would not increase as much as the increase in prices, and the result would be a 10-percent decline in the value-weighted volume of food consumption. Similarly, export demand could drop 30- to 40-percent in response to the increase in farm prices, and stocks would be reduced to current needs, essentially eliminating the excess stock demand.

Limitations to the Analysis

The GNP and employment impact estimates in the accompanying analysis are subject to a number of qualifications. First, they are measured relative to a base situation that assumes full use of our agricultural production capacity. In fact, the farm sector has operated at less than full capacity for 7 out of the past 10 years. Hence, part of the losses noted are hypothetical, because the economy has already absorbed them in arriving at the current level of income and employment.

Second, unlike the industrial sector, farm sector employment does not increase or decrease as output levels change. Thus, a substantial part of the employment change in the farm sector is more likely to be felt as underemployment of farm operators and their families than as a loss of jobs.

This study is based on input/output relationships in the national accounts maintained by the U.S. Department of Commerce. These relationships portray the structure of the economy for 1977. The national accounts measure the output of the economy (GNP) in terms of sales of products for final uses—domestic household consumption, investment, Government expenditures, and net foreign consumption.

The accompanying analysis focuses on the agriculture-related expenditures in this system—domestic household expenditures for food and nonfood, agricultural exports, agricultural and apparel imports, farm inventory changes, and Government purchases of farm commodities. The relationships between farms and farm-dependent industries are quite stable over time even though the level of economic activity in various industries changes from year to year.

Using these relationships, output, GNP, and employment estimates are projected to 1984 by correcting for the changes in prices and labor productivity that occurred in each of the industries since the base year.

The estimated relationships are subject to several limitations. First, the analyses of the effects of farm programs can only compare situations "with" versus "without" an economic shock or change in agricultural programs. Moreover, these comparisons show only the effects after the farm sector and the economy have had several years to adjust to a sustained change in programs; they do not show the annual adjustments entailed in getting to the new situation.

Second, some assumptions necessary to the analysis may introduce errors. However, these errors tend to balance each other, and the resulting estimates are as correct as possible given current knowledge and analytic techniques. Three assumptions tend to overstate the adjustments the economy would make:

- The analysis assumes no redeployment of factors (labor, land, inputs). That is, it assumes that each industry or sector would continue to use exactly the same methods of production or proportions of inputs as before the policy change or economic shock. In reality, each sector can alter the mix of inputs it uses as conditions change.
- The analysis assumes no reemployment of factors released by a change in the level of economic activity. For example, labor displaced from a sector is assumed not to be re-employed in another sector. In reality, changing the use of factors from one sector to another is a second way that the economy adjusts in the long run to a change or shock.
- The analysis assumes that the prices of all goods and services in the economy remain constant relative to each other. In actuality, changing the relative prices of goods is a third way that the economy accommodates a change or shock.

Although these assumptions overstate economic adjustments, they are balanced by considering only direct changes in input, farming, and downstream processing activities. For example, this analysis ignores the drop in automobile sales that would be caused by lower employment in agriculture-related industries. These indirect linkages are strong throughout the economy and tend to balance the errors inherent in the previous assumptions.

Nevertheless, the input/output method of analysis, which is relatively accurate over 2 to 4 years, progressively loses accuracy for longer periods, especially for very large program changes. This is because more factors can be redeployed or reemployed and relative prices of goods and services can change over time in response to a large shock or policy change.

As a result of the drastically reduced volume moving through the system, downstream activity would drop by $35 billion, on-farm activity by $18 billion, and input industry activity by $12 billion. Corresponding employment impacts would be the loss of 1.1 million jobs in processing and marketing, 660,000 jobs on farms, and 415,000 jobs in inputs industries—a total of nearly 2.1 million jobs lost.

A 125-million-acre reduction has a disproportionately larger nonfarm impact than a 30-million-acre reduction because all the downstream industries are involved, rather than just the input, farm, and storage sectors, which account for relatively little of the economy's total labor force and economic activity.

These linkage measures are subject to some practical limitations, but they do support several conclusions:

- The economy-wide impact of a large acreage reduction program on GNP and employment can, under some circumstances, overshadow their impacts on the farm economy.
- Small, annual farm programs, set up as temporary measures to limit Government accumulation of stocks, tend to have little employment and income impacts on the rest of the economy, but
- Large farm programs viewed as permanent measures to significantly raise farm prices affect the entire economy by causing cutbacks in industries linked to farm production.

[Gerald Schluter (202) 786-1285 and David Harrington (202) 786-1520]

Statistical Indicators

Summary Data

Table 1.—Key statistical indicators of the food and fiber sector

1987	1985		1986					1987	
	IV	Annual	I	II	III	IV F	Annual F	I F	II F
Prices received by farmers (1977=100)	126	128	123	122	124	122	123	122	123
Livestock & products	136	136	133	130	146	146	139	144	145
Crops	114	120	112	112	101	97	106	98	100
Prices paid by farmers, (1977=100)	149	151	149	146	145	143	146	142	142
Prod. items	162	163	163	161	161	160	161	160	160
Commodities & services, int., taxes, & wages	157	142	129	127	131	141-145	130-135	125-129	—
Cash receipts ($ bil.) 1/	73	69	66	67	76	73-77	68-72	68-72	—
Livestock ($ bil.)	84	73	63	60	55	65-69	59-63	55-59	—
Crops ($ bil.)									
Market basket (1967=100)	283	283	285	284	292	292	288	—	—
Retail cost	236	238	226	222	242	237	232	—	—
Farm value	310	309	319	321	316	320	319	—	—
Spread	31	31	30	30	32	32	31	—	—
Farm value/retail cost (%)									
Retail prices (1967=100)	311	310	315	317	322	323	319	—	—
Food	297	297	302	302	308	308	305	—	—
At home	351	347	354	359	362	366	360	—	—
Away-from home	7.8	31.2	7.4	5.7	5.5	7.8	26.3	7.1	5.9
Agricultural exports ($ bil.) 2/	4.9	19.7	5.6	5.4	5.0	5.2	20.9	5.5	5.3
Agricultural imports ($ bil.) 2/									
Production:	9,814	39,136	9,551	10,021	9,722	9,447	38,741	9,132	9,228
Red meats (mil. lb.)	4,293	16,871	4,107	4,536	4,658	4,535	17,836	4,445	4,845
Poultry (mil. lb.)	1,442	5,688	1,422	1,419	1,413	1,450	5,704	1,440	1,435
Eggs (mil. doz.)	35.6	143.7	36.2	38.5	35.9	34.4	145.1	34.8	37.4
Milk (bil. lb.)									
Consumption, per capita:	55.3	214.6	51.9	54.1	53.5	53.8	213.4	51.3	53.0
Red meats and poultry (lbs)	1,648.2	1,648.2	8,614.7	6,587.1	4,988.5	4,038.1	4,038.1	—	—
Corn beginning stocks (mil. bu.) 3/	1,899.5	6,485.7	2,028.9	1,600.9	956.4	—	6,650.0	—	—
Corn use (mil. bu.) 3/									
Prices: 4/	61.42	58.37	57.22	54.52	58.91	60-63	58-59	62-66	63-69
Choice steers--Omaha ($/cwt)	45.05	44.77	43.30	47.23	61.13	53-56	51-52	54-58	53-59
Barrows and gilts--7 mkts. ($/cwt)	50.2	50.8	50.3	54.3	66.6	54-57	56-57	51-55	51-57
Broilers--12-city (cts./lb.)	75.9	66.5	74.2	63.4	72.8	72-75	70-71	66-70	61-67
Eggs--NY Gr. A large (cts./doz.)	12.60	12.73	12.37	11.97	12.30	12.95-13.25	12.35-12.45	12.25-12.75	11.65-12.05
Milk--all at plant ($/cwt.)									
Wheat--Kansas city HRW ($/bu.)	3.31	3.40	3.33	3.22	2.50	—	—	—	—
Corn--Chicago ($/bu.)	2.41	2.65	2.48	2.51	1.71	—	—	—	—
Soybeans--Chicago ($/bu.)	5.11	5.55	5.34	5.32	4.90	—	—	—	—
Cotton--Avg. spot mkt. (cts./lb.)	56.1	58.5	60.0	63.9	42.0	—	—	—	—

	1978	1979	1980	1981	1982	1983	1984	1985	1986 F
Gross cash income ($ bil.)	117.3	135.1	143.3	146.0	150.6	150.2	154.9	156.2	148-152
Gross cash expenses ($ bil.)	84.2	101.7	109.1	113.2	113.8	113.0	115.6	112.1	104-108
Net cash income ($ bil.)	33.1	33.4	34.2	32.8	36.8	37.1	39.3	44.0	42-46
Net farm income	25.2	27.4	16.1	26.9	22.7	13.0	32.7	30.5	26-30
Farm real estate values (1977=100)	109	125	145	158	157	148	146	128	112

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; feed year annual. Use includes exports and domestic disappearance. 4/ Simple averages. p = preliminary. F = Forecast.

Table 2.—U.S. gross national product and related data

	Annual			1985		1986		
	1983	1984	1985	III	IV	I	II	III p
	$ Bil. (Quarterly data seasonally adjusted at annual rates)							
Gross national product	3,405.7	3,765.0	3,998.1	4,030.5	4,087.7	4,149.2	4,175.6	4,234.3
Personal consumption expenditures	2,234.5	2,428.2	2,600.5	2,627.1	2,667.9	2,697.9	2,732.0	2,799.3
Durable goods	289.1	331.2	359.3	373.3	362.0	360.8	373.9	410.2
Nondurable goods	816.7	870.1	905.1	907.4	922.6	929.7	928.4	935.5
Clothing & shoes	135.1	147.2	155.2	155.4	158.7	161.3	165.0	166.5
Food & beverages	421.9	449.9	469.3	470.4	477.4	484.6	490.3	494.8
Services	1,128.7	1,227.0	1,336.1	1,346.4	1,383.2	1,407.4	1,429.8	1,453.6
Gross private domestic investment	502.3	662.1	661.1	657.4	669.5	708.3	687.3	674.7
Fixed investment	509.4	598.0	650.0	654.3	672.6	664.4	672.8	682.3
Change in business inventories	-7.1	64.1	11.1	3.1	-3.1	43.8	14.5	-7.5
Net exports of goods & services	-6.1	-58.7	-78.9	-83.7	-105.3	-93.7	-104.5	-110.1
Government purchases of goods & services	675.0	733.4	815.4	829.7	855.6	836.7	860.8	870.4
	1982 $Bil. (Quarterly data seasonally adjusted at annual rates)							
Gross national product	3,279.1	3,489.9	3,585.2	3,603.8	3,622.3	3,655.9	3,661.4	3,683.3
Personal consumption expenditures	2,146.0	2,246.3	2,324.5	2,342.0	2,351.7	2,372.7	2,408.4	2,450.4
Durable goods	283.1	318.9	343.9	357.4	347.0	345.4	357.1	387.3
Nondurable goods	800.2	828.6	841.6	843.8	847.2	860.6	877.3	879.1
Clothing & shoes	132.7	142.7	146.0	146.5	147.5	152.4	157.1	158.2
Food & beverages	414.3	424.2	433.4	435.3	435.1	441.1	444.2	439.5
Services	1,062.7	1,098.7	1,139.0	1,140.8	1,157.5	1,166.6	1,174.0	1,184.0
Gross private domestic investment	504.0	652.0	647.7	643.8	653.2	684.0	664.7	648.6
Fixed investment	510.4	592.8	638.6	643.1	658.4	644.1	649.6	653.2
Change in business inventories	-6.4	59.2	9.0	0.7	-5.2	39.9	15.1	-4.5
Net exports of goods & services	-19.9	-83.6	-108.2	-113.8	-132.0	-125.9	-153.9	-164.6
Government purchases of goods & services	649.0	675.2	721.2	731.8	749.4	725.2	742.2	748.8
GNP implicit price deflator	3.9	3.8	3.3	2.5	3.6	2.5	1.8	3.6
% change	2,428.1	2,670.6	2,828.0	2,832.0	2,882.2	2,935.1	2,978.5	2,983.0
Disposable personal income ($bil.)	2,331.9	2,470.6	2,528.0	2,524.7	2,540.7	2,581.2	2,625.7	2,611.2
Disposable per. income (1982 $bil.)	10,340	11,265	11,817	11,819	11,999	12,193	12,348	12,338
Per capita disposable per. income ($)	9,930	10,421	10,563	10,537	10,577	10,723	10,886	10,800
Per capita dis. per. income (1982 $)								
U.S. population, total, incl. military abroad (mil.)	234.8	237.1	239.3	239.6	240.2	240.7	241.2	241.8
Civilian population (mil.)	232.6	234.8	237.0	237.2	237.9	238.4	239.0	239.4

	Annual			1985	1986			
	1983	1984	1985	Sept	June	July	Aug	Sept
	Monthly data seasonally adjusted							
Industrial production (1977=100)	109.2	121.4	123.8	124.3	124.2	124.9	125.1	125.3
Leading economic indicators (1967=100)	156.0	165.8	169.1	170.6	177.7	179.5	179.3	180.1
Civilian employment (mil. persons)	100.8	105.0	107.2	107.5	109.7	109.9	110.2	109.9
Civilian unemployment rate (%)	9.6	7.5	7.2	7.1	7.1	6.9	6.8	7.0
Personal income ($ bil. annual rate)	2,838.6	3,110.2	3,314.5	3,333.9	3,481.9	3,492.9	3,500.3	3,511.5
Money stock-M2 (daily avg.) ($bil) 1/	2,188.8	2,373.7	2,565.8	2,529.9	2,670.6	2,699.1	2,724.1	2,741.0
Three-month Treasury bill rate (%)	8.63	9.58	7.48	7.08	6.21	5.84	5.57	5.19
Aaa corporate bond yield (Moody's) (%)	12.04	12.71	11.37	11.07	9.13	8.88	8.72	8.89
Housing starts (thou.) 2/	1,703	1,750	1,742	1,653	1,852	1,782	1,818	1,680
Auto sales at retail, total (mil.)	9.2	10.4	11.0	14.3	11.1	10.7	12.7	16.1
Business inventory/sales ratio	1.38	1.34	1.37	1.36	1.38	1.38	1.38	--
Sales of all retail stores ($ bil.)	97.9	107.8	114.5	118.3	119.0	119.8	121.6 p	127.2
Nondurable goods stores ($ bil.)	64.8	68.9	71.6	72.3	73.4	73.5	73.9 p	73.8
Food stores ($ bil.)	21.2	22.5	23.5	23.8	24.4	24.5	24.5 p	24.7
Eating & drinking places ($ bil.)	9.6	10.4	10.9	11.0	11.7	11.8	11.9 p	12.0
Apparel & accessory stores ($ bil.)	5.0	5.4	5.8	5.9	6.3	6.3	6.4 p	6.3

1/ Private, including farm. p = preliminary.

Table 3.—Foreign economic growth, inflation, and export earnings[1,2]

	Average 1970–74	Average 1975–79	1980	1981	1982	1983	1984	1985	1986 est.
	Annual percent change								
Total foreign									
Real GNP	5.5	3.7	2.6	1.6	1.7	1.9	3.2	2.9	2.5
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.0	21.1	11.0
Export earnings	27.5	14.6	22.6	-2.2	-7.0	-2.6	5.4	1.7	—
Developed less U.S.									
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.5	3.0	2.4
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.7	2.6
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.4	6.1	4.9	—
Centrally planned									
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	3.0	3.4
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	—
Latin America									
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.2	3.6	2.7
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.3	179.6	85.0
Export earnings	28.1	12.8	30.1	4.8	-10.0	0.0	6.6	-5.6	—
Africa & Middle East									
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	0.2	0.7	-1.1
CPI	8.7	16.4	22.1	19.7	12.0	19.0	5.9	4.7	8.3
Export earnings	49.6	43.2	38.5	-7.0	-19.7	-17.5	-7.9	-7.8	—
Asia									
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.6	3.2	4.1
CPI	13.0	8.4	16.4	14.1	7.3	7.7	5.6	6.4	5.2
Export earnings	30.1	19.4	27.3	4.9	-0.6	3.8	13.8	-1.6	—

Information contact: Edward Wilson (202) 786-1688.

Farm Prices

Table 4.—Indexes of prices received and paid by farmers, U.S. average

	Annual			1985	1986					
	1983	1984	1985	Oct	May	June	July	Aug	Sept r	Oct p
	1977=100									
Prices received	135	142	128	123	123	121	125	125	122	121
All farm products	128	139	121	111	114	109	105	101	97	96
All crops	148	144	133	129	120	100	91	90	91	93
Food grains	143	145	122	105	118	110	97	87	77	73
Feed grains & hay	146	148	122	103	116	110	96	84	73	68
Feed grains	104	108	92	94	94	93	97	78	78	75
Cotton	155	153	154	156	141	141	141	128	136	130
Tobacco	102	109	84	75	78	78	77	78	75	71
Oil-bearing crops	128	202	183	186	157	177	165	179	173	178
Fruit, all	123	220	196	200	166	189	175	193	184	189
Fresh market 1/	130	135	128	112	144	115	117	122	129	133
Commercial vegetables	129	133	122	101	144	106	108	114	123	127
Fresh market	123	157	125	93	105	123	168	148	111	116
Potatoes & dry beans	141	146	136	134	131	133	143	149	146	145
Livestock & products	147	151	142	138	138	141	152	157	155	151
Meat animals	140	139	131	130	124	123	124	126	131	134
Dairy products	118	135	119	125	117	119	141	151	138	139
Poultry & eggs										
Prices paid	161	164	163	162	—	—	161	—	—	160
Commodities & services, interest, taxes, & wage rates	153	155	151	148	—	—	145	—	—	143
Production items	134	135	116	108	—	—	107	—	—	98
Feed	160	154	154	148	—	—	154	—	—	160
Feeder livestock	141	151	153	154	—	—	146	—	—	146
Seed	137	143	135	130	—	—	125	—	—	116
Fertilizer	125	128	128	128	—	—	126	—	—	126
Agricultural chemicals	202	201	201	202	—	—	155	—	—	154
Fuels & energy	152	147	146	145	—	—	144	—	—	143
Farm & motor supplies	170	182	193	193	—	—	197	—	—	199
Autos & trucks	174	181	178	174	—	—	175	—	—	172
Tractors & self-propelled machinery	171	180	183	184	—	—	184	—	—	184
Other machinery	138	138	136	136	—	—	136	—	—	136
Building & fencing	146	149	150	150	—	—	153	—	—	153
Farm services & cash rent	250	255	242	242	—	—	237	—	—	237
Interest payable per acre on farm real estate debt	129	132	133	133	—	—	136	—	—	136
Taxes payable per acre on farm real estate	148	151	154	150	—	—	166	—	—	166
Wage rates (seasonally adjusted)	159	161	157	154	—	—	153	—	—	152
Production items, interest, taxes, & wage rates										
Ratio, prices received to prices paid 2/	84	86	79	76	77	75	78	78	76	76
	615	650	586	560	560	554	569	573	558	552
							1,109	—	—	1,103
										50

Table 5.—Prices received by farmers, U.S. average

	Annual*			1985	1986					
	1983	1984	1985	Oct	May	June	July	Aug	Sept r	Oct p
Crops										
All wheat ($/bu.)	3.58	3.46	3.20	3.09	3.02	2.48	2.25	2.26	2.28	2.33
Rice, rough ($/cwt.)	8.31	8.32	7.85	7.73	5.01	4.83	4.47	3.82	3.82	3.94
Corn ($/bu.)	2.99	3.05	2.49	2.11	2.39	2.32	2.00	1.73	1.44	1.31
Sorghum ($/cwt.)	4.89	4.60	3.98	3.30	3.98	3.39	3.00	2.65	2.36	2.36
All hay, baled ($/ton)	73.66	75.38	70.05	66.00	70.90	62.40	58.70	58.30	58.40	57.40
Soybeans ($/bu.)	6.73	7.02	5.42	4.85	5.25	5.19	5.11	4.98	4.86	4.50
Cotton, Upland (cts./lb.)	62.9	65.6	55.9	57.3	56.9	56.4	58.6	47.2	47.4	45.4
Potatoes ($/cwt.)	5.82	5.69	3.91	3.51	4.09	4.98	7.21	6.25	4.50	4.23
Lettuce ($/cwt.) 1/	12.43	10.70	12.20	9.91	18.10	9.12	8.57	10.40	12.60	9.57
Tomatoes ($/cwt.)	26.48	27.93	28.63	21.20	26.90	19.80	20.20	20.20	20.80	30.60
Onions ($/cwt.)	9.56	13.56	9.33	6.40	9.53	10.90	11.10	9.70	9.25	10.20
Dry edible beans ($/cwt.)	22.40	18.70	17.80	16.80	16.70	17.30	17.30	16.90	15.40	23.30
Apples for fresh use (cts./lb.)	14.8	15.5	17.1	17.3	21.1	24.2	25.4	26.8	22.3	20.1
Pears for fresh use ($/ton)	216.00	300.00	348.00	355.00	604.00	838.00	280.00	341.00	341.00	419.00
Oranges, all uses ($/box) 2/	4.15	5.95	7.97	4.87	3.91	4.44	3.41	4.03	4.34	4.47
Grapefruit, all uses ($/box) 2/	1.79	2.68	3.77	4.71	4.41	5.54	5.94	6.76	6.63	6.29
Livestock										
Beef cattle ($/cwt.)	55.83	57.56	53.96	52.10	51.00	50.10	52.90	54.40	54.60	54.60
Calves ($/cwt.)	62.12	60.23	62.42	60.20	58.00	58.10	59.40	61.10	63.40	63.30
Hogs ($/cwt.)	46.2[illegible]	47.61	43.88	43.10	45.80	52.60	59.00	62.10	58.30	53.40
Lambs ($/cwt.)	55.48	60.33	68.08	67.80	76.30	74.00	71.90	69.50	67.60	62.60
All milk, sold to plants ($/cwt.)	13.57	13.45	12.73	12.60	12.00	11.90	12.00	12.20	12.70	13.00
Milk, manuf. grade ($/cwt.)	12.63	12.54	11.78	11.70	11.10	10.90	10.90	11.20	11.70	12.10
Broilers (cts./lb.)	29.3	33.2	30.2	28.4	30.9	34.0	42.4	45.9	37.8	40.7
Eggs (cts./doz.) 3/	63.1	70.3	57.4	63.9	56.2	50.5	58.6	62.[illegible]	62.8	58.1
Turkeys (cts./lb.)	36.5	46.6	47.2	56.9	40.7	46.1	49.3	50.[illegible]	51.2	52.6
Wool (cts./lb.) 4/	61.5	76.5	62.6	66.6	75.2	73.5	70.7	68.8	72.1	68.2

1/ Due to program modifications, 1983 data not comparable with 1984 and 1985. 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 4/ Average local market price, excluding incentive payments. *Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. p = preliminary. r = revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Producer and Consumer Prices

Table 6.—Consumer Price Index for all urban consumers, U.S. average (not seasonally adjusted)

	Annual	1985	1986							
	1985	Sept	Feb	Mar	Apr	May	June	July	Aug	Sept
			1967=100							
Consumer price index, all items	322.2	324.5	327.5	326.0	325.3	326.3	327.9	328.0	328.6	330.2
Consumer price index, less food	323.3	326.2	328.5	326.6	325.7	326.7	328.6	328.0	328.1	330.0
All food	309.8	309.9	315.3	315.4	316.1	317.0	317.1	320.1	322.7	323.2
Food away from home	346.6	349.9	354.2	355.5	357.0	358.8	360.2	360.8	361.8	363.3
Food at home	296.8	295.6	301.5	301.2	301.5	302.1	301.6	305.5	308.9	309.0
Meats 1/	265.5	260.4	268.4	266.6	262.3	262.1	264.4	272.9	279.8	283.6
Beef & veal	269.7	261.1	272.3	271.3	266.0	264.9	264.9	267.6	270.9	272.4
Pork	253.1	252.1	257.0	253.4	249.9	250.0	257.0	278.0	292.6	300.1
Poultry	216.4	215.9	218.5	218.2	215.7	218.7	223.7	240.3	255.0	249.5
Fish	405.9	408.6	430.6	435.6	437.0	437.1	434.5	447.3	446.3	447.2
Eggs	174.3	185.7	186.7	190.8	188.8	173.7	166.9	175.2	192.9	186.0
Dairy products 2/	258.0	258.0	257.3	256.8	256.8	257.1	257.2	258.4	258.3	258.5
Fats & oils 3/	294.4	294.8	291.4	290.2	288.5	287.2	287.0	287.3	287.8	285.6
Fresh fruit	361.8	368.5	353.3	352.0	367.9	385.5	372.4	382.2	391.5	384.1
Processed fruit 4/	168.2	169.5	165.7	164.9	163.8	163.5	161.4	161.8	162.3	161.9
Fresh vegetables	317.5	286.7	311.1	309.0	333.7	343.7	326.2	325.0	321.9	321.0
Potatoes	324.6	283.3	262.8	261.9	267.4	279.6	317.3	356.0	357.9	335.4
Processed vegetables 4/	147.7	148.2	147.6	147.2	147.5	147.4	148.0	148.4	148.5	146.9
Cereals & bakery products 4/	317.0	319.2	322.5	322.7	322.5	323.8	326.1	326.3	328.2	328.5
Sugar & sweets	398.8	401.1	408.6	408.4	411.4	411.2	411.5	412.4	413.1	413.7
Beverages, nonalcoholic	451.7	452.8	485.3	488.0	487.4	481.9	480.0	478.3	476.9	475.7
Apparel commodities less footwear	188.1	192.6	185.2	187.5	188.4	187.2	184.8	183.3	188.1	194.0
Footwear	212.1	210.9	207.9	210.1	211.4	211.5	210.0	209.1	209.6	212.0
Tobacco products	328.5	332.8	344.7	345.6	346.5	346.5	347.1	354.3	356.2	356.8
	229.5	229.3	238.3	238.8	239.5	239.4	240.1	240.4	240.1	240.4

[illegible] December 1977 = 100.

Table 7.—Producer price indexes, U.S. average (not seasonally adjusted)

	Annual			1985	1986					
	1983	1984	1985 p	Sept	Apr	May r	June	July	Aug	Sept
					1967=100					
Finished goods 1/	285.2	291.1	293.8	290.0	287.2	288.9	288.9	288.0	288.3	287.5
Consumer foods	261.8	273.3	271.2	265.7	271.9	274.8	275.1	280.7	283.6	282.2
Fresh fruit	252.0	253.0	256.0	249.6	248.1	270.9	265.3	284.6	244.8	238.3
Fresh & dried vegetables	248.9	278.3	245.3	210.3	255.9	256.6	232.7	238.7	237.8	243.6
Dried fruit	409.9	386.6	362.7	369.1	371.1	371.6	373.6	371.3	387.4	383.7
Canned fruit & juice	286.8	312.4	323.1	324.3	314.5	315.2	315.9	316.0	317.4	311.9
Frozen fruit & juice	301.8	351.0	363.4	358.9	308.9	308.7	311.2	312.1	311.0	310.5
Fresh veg. excl. potatoes	210.0	219.1	205.9	189.0	239.2	238.7	186.8	191.7	184.8	202.4
Canned veg. and juices	247.1	252.6	246.9	243.7	243.3	244.6	252.5	246.4	244.5	248.9
Frozen vegetables	283.6	291.0	298.4	299.0	297.7	298.9	299.1	298.7	298.2	298.1
Potatoes	319.8	397.7	304.3	208.2	253.4	259.6	335.4	352.6	367.1	330.8
Eggs	n.a.	210.8	171.0	188.3	169.5	162.1	149.0	167.3	191.4	181.1
Bakery products	285.9	299.1	313.5	317.1	320.3	320.4	321.7	322.0	323.2	323.4
Meats	236.4	236.8	227.5	213.6	215.1	225.5	227.1	242.3	253.2	251.4
Beef & veal	236.3	237.1	220.1	200.7	202.5	213.6	208.0	216.0	221.4	219.7
Pork	227.5	226.5	224.0	213.1	214.4	229.8	243.3	272.2	297.5	290.3
Processed poultry	185.3	206.0	197.5	201.4	188.9	192.5	202.3	226.8	246.0	220.4
Fish	445.2	476.0	492.1	466.4	527.6	513.5	536.2	516.6	528.7	534.8
Dairy products	250.6	251.7	249.4	246.2	246.0	246.9	247.2	247.8	249.6	250.6
Processed fruits & vegetables	277.4	294.3	296.7	295.0	285.6	286.3	289.9	287.6	290.3	289.0
Shortening & cooking oils	254.7	311.6	290.5	271.2	244.4	242.8	242.4	238.8	233.3	231.0
Consumer finished goods less foods	291.4	294.1	297.4	295.9	282.2	284.0	283.8	278.8	278.0	278.1
Beverages, alcoholic	205.0	209.8	213.0	214.4	218.0	218.7	217.7	217.8	218.6	216.6
Soft drinks	327.4	340.2	344.2	338.6	352.8	351.3	348.7	349.6	347.4	349.3
Apparel	197.4	201.3	204.2	204.6	206.5	206.8	206.4	206.9	206.5	206.7
Footwear	250.1	251.7	256.8	258.9	262.4	261.7	260.7	261.4	262.2	261.9
Tobacco products	365.4	398.4	428.2	436.0	451.4	451.7	451.7	467.1	468.1	469.2
Intermediate materials 2/	312.3	320.0	318.7	317.7	307.1	306.7	307.1	305.0	304.5	306.1
Materials for food manufacturing	258.4	271.1	258.7	249.9	244.8	248.7	247.8	251.6	255.7	254.3
Flour	186.2	185.2	183.1	178.1	179.5	188.6	175.2	166.3	165.4	162.4
Refined sugar 3/	172.1	173.5	165.6	165.1	165.1	165.1	165.2	165.0	167.1	167.8
Crude vegetable oils	194.2	262.2	219.4	184.6	142.2	142.6	138.5	132.8	123.0	123.6
Crude materials 4/	323.6	330.8	306.2	291.8	273.7	279.4	274.9	278.0	275.5	275.5
Foodstuffs & feedstuffs	252.2	259.5	235.0	215.4	220.3	229.9	226.1	233.6	236.3	231.9
Fruits & vegetables 5/	262.1	278.1	260.5	238.2	263.3	274.3	257.8	270.2	251.3	251.6
Grains	240.4	239.7	202.7	181.1	191.3	199.6	182.2	152.3	138.9	132.6
Livestock	243.1	251.8	229.7	198.5	213.9	229.2	223.2	243.0	250.7	250.9
Poultry, live	206.5	240.6	226.2	244.5	211.2	218.3	236.6	296.7	340.0	279.5
Fibers, plant & animal	227.0	228.4	197.8	191.1	210.6	215.5	219.5	220.6	94.3	107.9
Fluid milk	282.0	278.3	264.6	255.9	248.4	249.2	249.2	251.3	256.2	258.6
Oilseeds	245.3	253.3	202.7	187.3	197.9	201.0	201.4	198.0	183.5	187.2
Tobacco, leaf	274.2	274.6	274.1	276.4	250.2	248.4	248.4	248.4	225.5	239.6
Sugar, raw cane	315.9	312.0	291.2	288.5	289.5	288.8	293.8	293.7	292.9	293.2
All commodities	303.1	310.3	308.8	305.9	298.2	299.2	298.9	297.7	297.2	297.7
Industrial commodities	315.7	322.6	323.9	322.2	311.6	311.6	311.6	308.5	307.7	308.8
All foods 6/	257.5	269.2	264.6	258.1	262.0	265.4	265.5	270.9	273.9	272.2
Farm products & processed foods & feeds	253.9	262.4	250.5	243.0	246.2	250.8	249.5	255.6	256.2	254.6
Farm products	248.2	255.8	230.4	218.8	218.6	227.0	221.4	228.1	224.5	221.7
Processed foods & feeds 6/	255.9	265.0	260.5	255.3	259.9	262.3	263.4	267.0	269.9	269.0
Cereal & bakery products	261.0	270.5	279.7	281.1	282.6	283.1	282.2	281.6	281.7	280.8
Sugar & confectionery	292.8	301.2	291.1	290.1	293.4	294.0	295.1	296.4	297.8	297.9
Beverages	263.6	273.1	276.7	275.1	297.8	297.8	296.4	296.2	292.1	292.0

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977 = 100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977 = 100). p = preliminary. r = revised. n.a. = not available.

Information contact: Bureau of Labor Statistics (202) 523-1913.

Farm-Retail Price Spreads

Table 8.—Farm-retail price spreads

	Annual				1985	1986					
	1982	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Market basket 1/											
Retail cost (1967=100)	266.4	268.7	279.3	282.6	281.0	283.4	284.5	284.6	288.9	292.9	293.1
Farm value (1967=100)	247.8	242.3	255.4	257.1	221.7	218.3	224.4	225.0	239.3	247.4	245.1
Farm-retail spread (1967=100)	277.4	284.3	293.3	309.3	315.9	321.6	319.9	319.6	318.0	319.6	321.2
Farm value/retail cost (%)	34.4	33.4	33.9	31.1	29.2	28.5	29.2	29.3	30.7	31.2	31.0
Meat products											
Retail cost (1967=100)	270.3	267.2	268.1	265.5	260.4	262.3	262.1	264.4	272.9	279.8	283.6
Farm value (1967=100)	251.3	235.8	241.5	221.8	196.9	203.8	210.0	219.3	237.4	249.0	252.8
Farm-retail spread (1967=100)	292.4	304.0	299.1	316.6	334.8	330.8	323.2	317.2	314.5	315.8	319.7
Farm value/retail cost (%)	50.2	47.6	48.6	45.1	40.8	41.9	43.2	44.7	46.9	48.0	48.1
Dairy products											
Retail cost (1967=100)	247.0	250.0	253.2	258.0	258.0	256.8	257.1	257.2	258.4	258.3	258.5
Farm value (1967=100)	261.9	262.1	258.8	248.3	240.0	234.5	236.8	236.9	238.6	239.7	240.8
Farm-retail spread (1967=100)	233.9	239.3	248.3	266.5	273.8	276.4	274.9	275.0	275.8	274.6	274.1
Farm value/retail cost (%)	49.6	49.0	47.8	45.0	43.5	42.7	43.1	43.1	43.2	43.4	43.5
Poultry											
Retail cost (1967=100)	194.9	197.5	218.5	216.4	215.9	215.7	218.7	223.7	240.3	255.0	249.5
Farm value (1967=100)	201.9	213.0	249.9	234.9	249.0	219.8	229.2	253.8	305.1	326.4	282.2
Farm-retail spread (1967=100)	188.1	182.4	188.1	198.4	183.8	211.7	208.6	194.5	177.6	185.9	217.8
Farm value/retail cost (%)	50.7	53.1	56.3	53.4	56.7	50.1	51.5	55.8	62.4	63.0	55.6
Eggs											
Retail cost (1967=100)	178.7	187.1	209.0	174.3	185.7	188.8	173.7	166.9	175.2	192.9	186.0
Farm value (1967=100)	189.8	206.1	230.3	178.9	199.0	181.0	175.0	150.3	184.4	199.0	198.3
Farm-retail spread (1967=100)	162.7	159.5	178.2	167.6	166.5	200.1	171.8	190.9	161.9	184.1	168.3
Farm value/retail cost (%)	62.8	65.1	65.1	60.7	63.3	56.6	59.6	53.2	62.2	61.0	63.0
Cereal & bakery products											
Retail cost (1967=100)	283.4	292.5	305.3	317.0	319.2	322.5	323.8	326.1	326.3	328.2	328.5
Farm value (1967=100)	178.8	186.6	192.0	175.6	166.8	165.8	156.0	139.0	132.2	125.9	119.4
Farm-retail spread (1967=100)	305.1	314.0	328.7	346.3	350.7	354.9	358.5	364.8	366.5	370.5	371.8
Farm value/retail cost (%)	10.8	11.1	10.8	9.5	8.8	8.8	8.3	7.3	7.0	6.5	6.2
Fresh fruits											
Retail cost (1967=100)	323.2	303.6	345.3	383.5	391.3	379.8	400.5	399.3	406.9	418.2	407.7
Farm value (1967=100)	288.8	220.6	315.1	299.1	275.1	244.2	268.4	281.9	290.8	290.9	291.4
Farm-retail spread (1967=100)	338.7	340.8	358.9	421.4	443.5	440.7	459.8	446.5	459.0	475.3	459.9
Farm value/retail cost (%)	27.7	22.5	28.3	24.2	21.8	19.9	20.8	22.1	22.1	21.5	22.1
Fresh vegetables											
Retail costs (1967=100)	288.9	299.3	331.8	317.5	286.7	335.7	343.7	326.2	325.0	321.9	321.0
Farm value (1967=100)	261.3	267.4	298.7	256.7	210.4	241.7	299.3	209.8	228.7	263.8	267.0
Farm-retail spread (1967=100)	301.8	314.3	347.4	346.1	322.6	376.9	364.6	380.9	370.3	349.2	346.4
Farm value/retail cost (%)	28.9	28.6	28.8	25.9	23.5	23.2	27.8	20.6	22.5	26.2	266.0
Processed fruits & vegetables											
Retail cost (1967=100)	286.0	288.8	306.1	314.1	315.9	309.7	309.2	307.9	308.6	309.2	307.3
Farm value (1967=100)	321.1	300.5	343.5	378.5	377.9	324.0	322.8	324.2	325.0	320.6	318.1
Farm-retail spread (1967=100)	278.2	286.2	297.8	299.9	302.2	306.5	306.2	304.3	305.0	306.7	304.9
Farm value/retail costs (%)	20.4	18.9	20.3	21.8	21.7	19.0	18.9	19.1	19.1	18.8	18.8
Fats & oils											
Retail cost (1967=100)	259.9	263.1	288.0	294.4	294.8	288.5	287.2	287.0	287.3	287.8	285.6
Farm value (1967=100)	207.8	251.0	324.8	271.3	224.0	213.5	211.2	205.3	196.8	187.0	178.0
Farm-retail spread (1967=100)	279.9	267.8	273.8	303.3	322.0	317.4	316.4	319.2	322.1	326.6	327.0
Farm value/retail cost (%)	22.2	26.5	31.3	25.6	21.1	20.6	20.4	19.7	19.0	18.1	17.5

	Annual				1985	1986					
	1982	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Beef, Choice											
Retail price 2/ (cts./lb.)	242.5	238.1	239.6	232.6	223.6	227.0	226.8	226.6	227.4	230.2	231.0
Net carcass value 3/ (cts.)	150.7	145.4	147.6	135.2	121.4	125.2	129.7	125.7	135.4	135.6	135.8
Net farm value 4/ (cts.)	140.5	136.2	140.0	126.8	111.1	116.2	120.4	113.3	124.9	128.2	129.0
Farm-retail spread (cts.)	102.0	101.9	99.6	105.8	112.5	110.8	106.4	113.3	102.5	102.0	102.0
Carcass-retail spread 5/ (cts.)	91.8	92.7	92.0	97.4	102.2	101.8	97.1	100.9	94.0	94.6	95.2
Farm-carcass spread 6/ (cts.)	10.2	9.2	7.6	8.4	10.3	9.0	9.3	12.4	8.5	7.4	6.8
Farm value/retail price (%)	58	57	58	55	50	51	53	50	55	56	56
Pork											
Retail price 2/ (cts./lb.)	175.4	169.8	162.0	162.0	159.8	162.2	162.3	166.5	183.4	190.3	194.4
Wholesale value 3/ (cts.)	121.8	108.9	110.1	101.1	93.1	91.7	102.8	112.2	127.4	131.9	127.3
Net farm value 4/ (cts.)	88.0	76.5	77.4	71.4	64.3	64.8	76.6	89.8	97.9	102.0	95.7
Farm-retail spread (cts.)	87.4	93.3	84.6	90.6	95.5	97.4	85.7	76.7	85.5	88.3	98.7
Wholesale-retail spread 5/ (cts.)	53.6	60.9	51.9	60.9	66.7	70.5	59.5	54.3	56.0	58.4	67.1
Farm-wholesale spread 6/ (cts.)	33.8	32.4	32.7	29.7	28.8	26.9	26.2	22.4	29.5	29.9	31.6
Farm value/retail price (%)	50	45	48	44	40	40	47	54	53	54	49

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 736, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1830.

Table 9. Price Indexes of food marketing costs

	Annual			1985			1986		
	1983	1984	1985	II	III	IV	I	II	III p
					1967=100				
Labor-hourly earnings	356.8	367.3	367.3	368.1	365.3	366.5	367.3	364.9	359.5
and benefits	341.9	351.2	358.8	360.0	357.2	361.6	366.6	372.6	365.3
Processing	358.1	376.4	389.3	387.8	391.7	391.7	386.8	377.3	378.1
Wholesaling	371.1	379.4	366.1	367.5	361.5	360.2	359.2	351.8	345.5
Retailing									
Packaging & containers	280.7	307.6	308.2	312.9	305.7	296.9	302.9	304.7	307.1
Paperboard boxes & containers	251.0	281.1	275.1	279.4	269.7	265.6	265.8	268.4	273.8
Metal cans	374.3	397.3	414.3	414.3	414.6	419.8	429.9	430.2	430.2
Paper bags & related products	265.4	280.9	288.1	289.2	286.4	285.9	286.1	287.8	290.1
Plastic films & bottles	226.2	272.1	255.2	272.1	272.1	205.7	224.7	224.7	224.7
Glass containers	352.4	360.8	379.8	377.6	386.9	387.0	391.1	397.9	400.1
Metal foil	214.0	226.9	213.8	218.2	211.3	209.0	208.9	208.9	207.5
Transportation services	374.5	390.9	393.9	393.9	393.9	393.9	393.9	393.9	393.9
Advertising	280.2	300.5	320.7	319.0	322.6	324.4	333.3	338.4	341.6
Fuel & power	705.1	712.5	699.7	702.8	688.5	711.4	642.5	586.0	570.3
Electric	417.9	440.0	453.8	452.5	462.6	453.5	458.3	457.8	467.2
Petroleum	895.9	880.4	821.5	823.0	766.4	878.0	660.3	477.6	415.7
Natural gas	1,155.0	1,162.9	1,155.8	1,173.3	1,170.8	1,124.2	1,107.4	1,111.8	1,106.1
Communications, water & sewage	199.6	215.5	224.9	222.4	228.0	229.3	231.4	235.9	238.8
Rent	260.6	261.6	268.2	266.3	270.2	270.7	273.6	275.3	276.1
Maintenance & repair	338.2	350.3	360.3	358.4	360.7	364.1	367.2	364.2	369.1
Business services	291.9	306.1	321.3	320.6	323.7	327.3	330.4	333.3	335.5
Supplies	286.5	288.5	287.8	287.7	288.2	287.3	287.4	282.3	280.7
Property taxes & insurance	327.5	343.7	362.0	358.1	365.5	370.7	375.3	380.7	384.2
Interest, short-term	174.0	198.8	157.2	157.5	150.7	150.7	145.1	128.0	115.3
Total marketing cost index	342.4	358.1	360.0	360.9	358.4	359.1	358.1	355.0	352.5

1/ Indexes measure changes in employee wages and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. p = preliminary.

Note: Annual historical data on food marketing cost indexes may be found in Food Consumption, Prices, and Expenditures, Statistical Bulletin 713, ERS, USDA.

Information contact: Denis Dunham (202) 786-1870.

Table 10.—U.S. meats supply and use

Item	Beg. stks	Production 1/	Imports	Total supply	Exports	Shipments	Military consumption	Ending stocks	Civilian consumption: Total	Civilian consumption: Per capita 2/	Primary market price 3/
	Million pounds 4/									Pounds	
Beef:											
1984	325	23,598	1,823	25,746	329	47	121	358	24,900	78.5	65.34
1985	358	23,728	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,112	2,125	26,554	500	55	122	325	25,552	79.0	58-59
1987 f	325	22,546	2,150	25,021	450	60	110	325	24,076	73.8	62-68
Pork:											
1984	301	14,812	954	16,067	164	14/	86	274	15,396	61.8	48.86
1985	274	14,807	1,128	16,209	128	131	78	229	15,643	62.1	44.77
1986	229	14,047	1,080	15,357	105	133	77	210	14,825	58.2	51-53
1987 f	210	13,855	1,100	15,165	120	140	80	225	14,500	56.4	53-59
Veal:											
1984	9	495	24	528	6	1	4	14	503	1.8	60.23
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	519	22	552	5	1	7	7	534	1.8	61-62
1987 f	7	426	20	453	4	1	7	7	434	1.5	63-69
Lamb and mutton:											
1984	11	379	20	410	2	3	0	7	398	1.5	62.17
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	335	40	388	2	1	0	14	371	1.4	68-69
1987 f	14	326	45	385	2	1	0	8	374	1.4	67-74
Total red meat:											
1984	646	39,284	2,821	42,751	501	198	202	653	41,197	143.6	n.a.
1985	653	39,408	3,255	43,316	461	185	192	570	41,908	144.5	n.a.
1986	570	39,014	3,267	42,851	597	190	206	556	41,302	140.6	n.a.
1987 f	556	37,153	3,315	41,024	576	202	197	565	39,484	133.4	n.a.
Broilers:											
1984	21	13,016	0	13,038	407	145	34	20	12,432	52.9	55.6
1985	20	13,762	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,345	0	14,371	520	135	35	25	13,656	57.1	56-57
1987 f	25	15,263	0	15,288	520	140	36	25	14,567	60.3	50-56
Mature chicken:											
1984	92	672	0	764	26	2	2	119	614	2.6	n.a.
1985	119	636	0	755	21	1	2	144	587	2.5	n.a.
1986	144	667	0	811	18	3	2	110	678	2.8	n.a.
1987 f	110	640	0	750	20	4	1	110	615	2.5	n.a.
Turkeys:											
1984	162	2,685	0	2,847	27	7	13	125	2,676	11.4	74.4
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,306	0	3,456	25	5	14	170	3,241	13.5	72-73
1987 f	170	3,846	0	4,015	25	4	16	150	3,821	15.8	64-70
Total poultry:											
1984	275	16,373	0	16,648	460	153	49	264	15,722	66.9	n.a.
1985	264	17,339	0	17,604	465	151	49	321	16,618	70.1	n.a.
1986	321	18,318	0	18,638	562	144	52	305	17,576	73.4	n.a.
1987 f	305	19,749	0	20,054	565	148	53	285	19,003	78.7	n.a.
Red meat & poultry:											
1984	921	55,657	2,821	59,399	961	351	251	917	56,919	210.5	n.a.
1985	917	56,747	3,255	60,920	926	336	241	891	58,526	214.6	n.a.
1986	891	57,332	3,267	61,498	1,159	334	258	861	58,878	214.0	n.a.
1987 f	861	56,902	3,315	61,078	1,141	350	250	850	58,487	212.1	n.a.

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. n.a. = not available. f = forecast.

Information contact: Ron Gustafson (202) 786-1830.

Table 11.—U.S. egg supply and use

	Beg. stocks	Production	Imports	Total supply	Exports	Shipments	Military use	Hatching use	Ending stocks	Civilian consumption: Total	Civilian consumption: Per capita	Wholesale price*
	Million dozen										No.	Cts./doz.
1982	17.5	5,801.9	2.5	5,821.8	158.2	26.7	22.4	505.6	20.3	5,088.6	265.1	70.1
1983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9
1985	11.1	5,687.5	12.7	5,711.3	70.6	30.3	20.2	548.1	10.7	5,031.3	254.6	66.4
1986 e	10.7	5,703.5	15.6	5,729.8	100.4	24.2	18.8	563.2	10.0	5,013.2	251.4	70-71
1987 f	10.0	5,780.0	12.0	5,802.0	100.0	24.0	20.0	600.0	10.0	5,048.0	250.8	65-71

* Cartoned Grade A large eggs in New York. e = estimated. f = forecast.

Information contact: Allen Baker (202) 786-1830.

Table 12.—U.S. milk supply and use[1]

Calendar year	Production	Farm use	Commercial: Farm marketings	Commercial: [illegible] stocks	Imports	Total commercial supply	CCC net removals	Commercial: Ending stocks	Commercial: Disappearance	All milk price 2/
	Billion pounds									$/cwt
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.7	2.5	141.2	4.9	2.8	148.9	13.2	4.6	131.1	12.75
1986 p	145.1	2.3	142.7	4.6	2.9	150.2	10.6	4.8	134.8	12.45

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. p = preliminary.

Information contact: Jim Miller (202) 786-1830.

Livestock and Products

Table 13.—Poultry and eggs

	Annual			1985	1986					
	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Broilers										
Federally inspected slaughter, certified (mil. lb.)	12,389.0	12,998.6	13,569.2	1,081.9	1,249.6	1,229.1	1,194.5	1,197.5	1,180.5	1,220.7
Wholesale price, 12-city, (cts./lb.)	50.4	55.6	50.8	52.2	50.0	54.6	58.3	69.1	69.7	61.0
Price of grower feed ($/ton)	223	233	197	189	189	n.a.	n.a.	190	n.a	n.a.
Broiler-feed price ratio 1/	2.6	2.8	3.1	3.2	3.2	n.a.	n.a.	4.5	n.a	n.a.
Stocks beginning of period (mil. lb.)	22.3	21.2	19.7	29.3	23.8	22.3	23.7	23.3	24.0	24.3
Broiler-type chicks hatched (mil) 2/	4,447.0	4,593.9	4,803.8	380.1	423.9	438.5	428.3	429.8	415.8	401.6
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	2,563	2,574	2,800	288.3	205.2	236.4	275.8	307.6	299.4	326.8
Wholesale price, New York, 8-16 lb. young hens (cts./lb.)	60.5	74.4	75.5	82.4	64.6	67.1	73.8	77.8	80.5	81.2
Price of turkey grower feed ($/ton)	247	245	212	209	215	n.a.	n.a.	221	n.a	n.a.
Turkey-feed price ratio 1/	3.0	3.8	4.4	5.0	3.5	n.a.	n.a.	4.5	n.a	n.a.
Stocks beginning of period (mil.lb.)	203.9	161.8	125.3	387.8	150.0	186.3	226.8	294.0	388.1	449.3
Poults placed in U.S. (mil.)	181.8	190.0	197.8	10.7	23.0	24.2	23.6	22.3	16.4	13.6
Eggs										
Farm production (mil.)	67,911	68,498	68,250	5,545	5,651	5,781	5,593	5,690	5,706	5,560
Average number of layers (mil.) 3/	276	278	277	255	231	229	227	226	227	n.a.
Rate of lay (eggs per layer on farms) 3/	247	245	247	21.0	20.5	21.1	20.6	20.9	20.9	n.a.
Cartoned price, New York, grade A large (cts./doz.) 4/	75.2	80.9	66.4	73.5	65.7	65.2	59.2	73.0	72.8	n.a.
Price of laying feed ($/ton)	204	206	182	177	177	n.a.	n.a.	172	n.a	n.a.
Egg-feed price ratio 1/	6.2	6.8	6.3	7.1	6.5	n.a.	n.a.	6.8	n.a	n.a.
Stocks, first of month										
Shell (mil. doz.)	1.02	.39	.93	.60	.60	.96	1.32	1.14	.75	.99
Frozen (mil. doz.)	19.3	8.9	10.2	14.0	8.1	9.5	8.6	10.7	11.5	11.4
Replacement chicks hatched (mil.)	407	459	407	33.6	42.7	42.7	37.4	33.5	33.4	32.5

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. n.a. = not available.

Information contact: Allen Baker (202) 786-1830.

Table 14.—Dairy

	Annual			1985	1986					
	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Milk prices, Minnesota-Wisconsin, 3.5% fat ($/cwt.) 1/	12.49	12.29	11.48	11.12	10.98	10.98	11.00	11.06	11.33	11.55
Wholesale prices										
Butter, Grade A Chi. (cts./lb.)	147.3	148.8	141.1	141.2	138.7	138.7	139.1	143.7	153.9	154.2
Am. cheese, Wis. assembly pt. (cts./lb.)	138.3	138.0	127.7	124.3	125.0	126.0	125.4	126.7	129.5	129.7
Nonfat dry milk, (cts./lb.) 2/	93.2	90.9	84.0	80.8	80.4	80.4	80.4	80.4	80.6	80.6
USDA net removals										
Total milk equiv. (mil. lb.) 3/	16,813.7	8,637.0	13,174.1	718.7	1,701.3	1,425.8	1,105.6	585.0	111.0	172.2
Butter (mil. lb.)	413.2	202.3	334.2	13.3	50.8	39.0	20.5	3.3	-4.5	-.5
Am. cheese (mil. lb.)	832.8	447.3	629.0	44.7	65.6	62.4	68.6	51.8	20.2	17.9
Nonfat dry milk (mil. lb.)	1,061.0	678.4	940.6	71.4	105.5	99.9	108.6	80.5	46.6	41.0
Milk										
Milk prod. 21 states (mil. lb.)	117,533	114,545	121,568	10,042	10,697	11,193	10,775	10,547	10,245	9,772
Milk per cow (lb.)	12,756	12,691	13,204	1,079	1,162	1,223	1,182	1,166	1,138	1,090
Number of milk cows (thou.)	9,214	9,026	9,207	9,303	9,208	9,155	9,113	9,047	8,999	8,966
U.S. milk production (mil. lb.)	139,672	135,450	143,667	11,857	5/12,656	5/13,186	5/12,675	5/12,409	5/12,028	5/11,481
Stock, beginning 4/										
Total (mil. lb.)	20,054	22,646	16,429	15,895	15,401	16,233	17,481	17,811	17,974	17,126
Commercial (mil. lb.)	4,603	5,234	4,937	5,250	4,991	5,057	5,244	5,278	5,284	5,304
Government (mil. lb.)	15,451	17,412	11,492	10,646	10,219	11,176	12,236	12,533	12,690	11,822
Imports, total (mil. lb.) 3/	2,616	2,741	2,777	246	162	175	207	214	212	214
Commercial disappearance milk equiv. (mil. lb.)	122,474	126,912	131,150	11,406	10,861	11,551	11,552	11,835	11,913	11,566
Butter										
Production (mil. lb.)	1,299.2	1,103.3	1,247.8	92.1	121.7	116.0	92.0	81.5	72.3	79.2
Stocks, beginning (mil. lb.)	466.8	499.4	296.5	264.6	283.3	304.7	333.8	342.8	337.6	304.4
Commercial disappearance (mil. lb.)	881.7	902.7	918.2	79.2	74.3	73.8	76.3	81.6	75.2	80.6
American cheese										
Production (mil. lb.)	2,927.7	2,648.5	2,854.4	216.9	266.1	280.8	262.1	244.1	224.0	201.7
Stocks, beginning (mil. lb.)	981.4	1,161.5	960.5	946.3	822.3	857.6	902.6	921.0	935.7	923.0
Commercial disappearance (mil. lb.)	2,083.3	2,253.6	2,278.3	190.8	199.0	206.6	187.3	191.1	209.7	205.6
Other cheese										
Production (mil. lb.)	1,891.8	2,025.5	2,170.5	182.7	194.9	199.7	197.0	195.2	200.9	213.1
Stocks, beginning (mil. lb.)	82.8	104.9	101.4	106.1	112.1	95.6	94.8	98.0	100.5	100.2
Commercial disappearance (mil. lb.)	2,134.3	2,310.9	2,460.5	215.5	199.4	219.4	215.9	215.4	221.3	238.1
Nonfat dry milk										
Production (mil. lb.)	1,499.9	1,160.7	1,390.0	106.8	137.2	144.0	136.7	115.1	95.9	75.2
Stocks, beginning (mil. lb.)	1,282.0	1,405.2	1,247.6	1,068.7	988.0	965.7	1,024.4	1,011.8	997.2	934.4
Commercial disappearance (mil. lb.)	459.9	497.8	435.0	35.2	26.9	38.2	28.3	52.8	51.4	47.3
Frozen dessert production (mil. gal.) 4/	1,224.2	1,241.8	1,249.4	106.6	111.4	125.3	130.8	135.5	126.6	107.0

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process.
3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Estimated.

Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1985	1986					
	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
U.S. wool price, Boston 1/ (cts./lb.)	212	229	192	193	188	198	198	193	190	190
Imported wool price, Boston 2/ (cts./lb.)	248	241	197	194	210	216	203	n.a.	187	184
U.S. mill consumption, scoured										
Apparel wool (thou. lb.)	126,729	128,982	106,051	10,417	13,491	10,803	11,454	12,288	9,919	9,956
Carpet wool (thou. lb.)	13,851	13,088	10,562	1,121	930	924	629	866	1,032	982

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4'' and up.
2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. n.a. = not available.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat animals

	Annual			1985	1986					
	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Cattle on feed (7-States)										
Number on feed (thou. head) 1/	8,316	8,006	8,635	6,155	7,263	7,077	7,076	6,523	6,321	6,404
Placed on feed (thou. head)	19,744	20,772	19,346	1,988	1,555	1,746	1,142	1,544	1,812	2,083
Marketings (thou. head)	18,701	18,785	18,989	1,603	1,621	1,615	1,128	1,682	1,659	1,617
Other disappearance (thou. head)	1,354	1,376	1,132	79	120	132	67	64	70	59
Beef steer-corn price ratio, Omaha 2/	20.6	21.6	23.3	21.8	22.9	22.8	22.3	29.0	36.6	42.4
Hog-corn price ratio, Omaha 2/	15.9	16.1	17.8	17.1	17.2	19.5	22.4	30.3	39.3	42.9
Market prices ($ per cwt.)										
Slaughter cattle:										
Choice steers, Omaha	62.37	65.34	58.37	51.29	53.68	55.79	54.08	58.27	59.04	59.43
Utility cows, Omaha	39.35	39.81	38.32	36.00	35.95	37.91	38.77	38.32	37.62	38.42
Choice vealers, S. St. Paul	72.97	63.95	58.28	60.00	55.00	55.83	61.10	62.13	62.50	67.50
Feeder cattle:										
Choice, Kansas City, 600-700 lb.	63.70	65.28	64.56	60.25	60.32	60.40	58.50	61.00	65.75	65.50
Slaughter hogs:										
Barrows & gilts, 7-markets	47.71	48.86	44.77	40.38	40.27	46.91	54.50	60.99	63.39	59.01
Feeder pigs:										
S. Mo. 40-50 lb. (per head)	34.03	39.12	37.20	31.11	37.98	39.97	41.92	50.76	56.64	59.63
Slaughter sheep & lambs:										
Lambs, Choice, San Angelo	57.40	62.18	68.61	69.75	74.22	81.25	77.36	73.84	68.12	66.38
Ewes, Good, San Angelo	16.85	20.90	34.02	33.62	32.00	33.94	35.88	35.31	34.88	29.38
Feeder lambs:										
Choice, San Angelo	54.87	61.02	85.91	76.50	79.98	84.22	84.69	79.97	80.00	83.88
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	97.83	98.01	90.76	81.14	83.34	86.42	83.58	89.25	90.98	90.50
Canner & Cutter cow beef	78.48	74.70	74.13	70.23	68.76	71.39	73.41	73.33	71.50	72.60
Pork loins, 8-14 lb. 3/	--	96.36	91.51	89.44	89.31	102.53	111.58	121.77	125.73	118.84
Pork bellies, 12-14 lb.	60.58	60.08	59.50	51.40	49.45	61.82	71.83	90.08	89.10	75.64
Hams, skinned, 14-17 lb.	75.60	78.22	67.50	65.00	58.20	64.89	69.69	85.57	92.16	98.98
Commercial slaughter (thou. head)*										
Cattle	36,649	37,582	36,293	2,999	3,215	3,235	3,123	3,322	3,203	3,128
Steers	17,486	17,474	16,912	1,397	1,542	1,506	1,519	1,555	1,497	1,499
Heifers	10,758	10,691	11,237	978	927	971	921	1,004	1,009	957
Cows	7,597	8,617	7,387	561	692	693	621	698	635	608
Bulls & stags	808	789	758	62	54	65	62	65	62	64
Calves	3,076	3,297	3,385	292	303	276	257	300	278	281
Sheep & lambs	6,619	6,759	6,165	497	492	431	419	448	443	511
Hogs	87,584	85,168	84,492	6,940	7,354	6,884	6,076	6,098	5,972	6,502
Commercial production (mil. lb.)										
Beef	23,060	23,418	23,557	1,985	2,111	2,109	2,027	2,148	2,077	2,050
Veal	428	479	499	42	45	43	41	45	44	43
Lamb & mutton	367	371	352	28	29	25	24	25	25	30
Pork	15,117	14,720	14,728	1,196	1,292	1,210	1,065	1,063	1,037	1,137

	Annual			1985			1986			
	1983	1984	1985	II	III	IV	I	II	III	IV
Cattle on feed (13-States)										
Number on feed (thou. head) 1/	10,271	9,908	10,653	9,688	8,670	7,937	9,694	8,915	7,950	8,197
Placed on feed (thou. head)	23,776	24,917	23,326	5,206	5,480	7,325	5,260	5,181	6,326	---
Marketings (thou. head)	22,548	22,540	22,887	5,787	5,969	5,224	5,723	5,771	5,846 5/	5,404
Other disappearance (thou. head)	1,591	1,632	1,398	437	244	344	316	375	233	---
Hogs & pigs (10-States) 4/										
Inventory (thou. head) 1/	44,150	42,420	41,100	39,680	41,650	41,820	41,100	38,600	38,045	39,585
Breeding (thou. head) 1/	5,638	5,348	5,258	5,220	5,397	5,377	5,258	4,988	4,840	4,840
Market (thou. head) 1/	38,512	37,072	35,842	34,460	36,253	36,443	35,842	33,612	33,205	34,745
Farrowings (thou. head)	9,735	9,020	9,020	2,420	2,191	2,265	1,940	2,161	2,034 5/	2,060
Pig crop (thou. head)	72,733	67,680	67,648	18,762	16,941	17,255	14,880	16,878	15,853	---

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. *Classes estimated.

Information contact: Ron Gustafson (202) 786-1830.

Table 17.—Supply and utilization[1,2]

	Area											Farm price 5/
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	
	Mil. acres			Bu/acre	Mil. bu							$/bu
Wheat												
1981/82	0	88.3	80.6	34.5	2,785	3,777	135	712	1,771	2,618	1,159	3.65
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,509	2,417	1,515	3.55
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.53
1984/85*	18.6	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.38
1985/86*	18.8	75.6	64.7	37.5	2,425	3,865	273	771	915	1,960	1,905	3.16
1986/87*	20.1	71.8	60.5	34.3	2,077	3,991	350	780	1,025	2,155	1,836	2.20-2.40
	Mil. acres			lb/acre	Mil. cwt (rough equiv.)							$/cwt
Rice												
1981/82	0	3.83	3.79	4,819	182.7	199.6	—	6/ 78.1	82.0	150.6	49.0	9.05
1982/83	0.42	3.30	3.26	4,710	153.6	203.4	—	6/ 82.9	68.9	131.8	71.5	8.11
1983/84	1.74	2.19	2.17	4,598	99.7	171.9	—	6/ 54.7	70.3	125.0	46.9	8.76
1984/85*	.79	2.83	2.80	4,954	138.8	187.3	—	6/ 60.5	62.1	122.6	64.7	8.06
1985/86*	1.16	2.52	2.50	5,437	136.0	202.9	—	6/ 66.9	58.7	125.6	77.3	6.72
1986/87*	1.20	2.35	2.33	5,626	131.3	210.7	—	6/ 67.0	80.0	147.0	63.1	3.45-4.25
	Mil. acres			Bu/acre	Mil. bu							$/bu
Corn												
1981/82	0	84.1	74.5	108.9	8,119	9,512	4,169	796	2,010	6,975	2,537	2.50
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	894	1,834	7,249	3,523	2.68
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.25
1984/85*	3.9	80.5	71.9	106.7	7,674	8,684	4,116	1,055	1,865	7,036	1,648	2.62
1985/86*	5.4	83.3	75.1	118.0	8,865	10,524	4,116	1,129	1,241	6,486	4,038	2.35
1986/87*	13.0	76.6	69.0	119.3	8,223	12,264	4,200	1,150	1,300	6,650	5,614	1.35-1.65
	Mil. acres			Bu/acre	Mil. bu							$/bu
Sorghum												
1981/82	0	15.9	13.7	64.0	876	1,006	417	10	260	687	319	2.38
1982/83	0.7	16.0	14.1	59.1	835	1,154	495	10	210	715	439	2.52
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.84
1984/85*	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.39
1985/86*	.9	18.3	16.7	66.7	1,113	1,413	655	29	178	862	551	2.15
1986/87*	2.5	15.0	13.5	66.7	900	1,451	575	30	200	805	646	1.30-1.50
	Mil. acres			Bu/acre	Mil. bu							$/bu
Barley												
1981/82	0	9.6	9.0	52.4	474	621	198	175	100	473	148	2.44
1982/83	0.4	9.5	9.0	57.2	516	675	241	170	47	458	217	2.22
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.50
1984/85*	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.26
1985/86*	.7	13.2	11.6	51.0	591	847	333	167	22	522	325	2.00
1986/87*	1.8	13.0	12.0	50.0	600	930	300	175	100	575	355	1.40-1.60
	Mil. acres			Bu/acre	Mil. bu							$/bu
Oats												
1981/82	0	13.6	9.4	54.2	510	689	453	77	7	537	152	1.89
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.67
1984/85*	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.69
1985/86*	.1	13.3	8.2	63.7	521	729	461	83	2	546	183	1.25
1986/87*	0.7	14.7	7.0	54.9	384	596	400	85	2	487	109	0.95-1.20
	Mil. acres			Bu/acre	Mil. bu							$/bu
Soybeans												
1981/82	0	67.5	66.2	30.1	1,989	2,302	7/ 89	1,030	929	2,048	254	6.04
1982/83	0	70.9	69.4	31.5	2,190	2,444	7/ 86	1,108	905	2,099	345	5.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/ 79	983	743	1,805	176	7.81
1984/85*	0	67.8	66.1	28.1	1,861	2,037	7/ 93	1,030	598	1,721	316	5.78
1985/86*	0	63.1	61.6	34.1	2,099	2,415	7/ 86	1,053	740	1,879	536	5.10
1986/87*	0	61.8	59.5	33.8	2,009	2,545	7/ 90	1,080	760	1,928	615	4.50-4.90
								Mil. lbs				8/ ¢/lb
Soybean oil												
1981/82	—	—	—	—	10,979	12,715	—	9,536	2,077	11,612	1,103	19.0
1982/83	—	—	—	—	12,041	13,144	—	9,858	2,025	11,883	1,261	20.6
1983/84	—	—	—	—	10,872	12,133	—	9,588	1,824	11,412	721	30.6
1984/85*	—	—	—	—	11,468	12,209	—	9,917	1,660	11,577	632	29.5
1985/86*	—	—	—	—	11,620	12,260	—	10,062	1,258	11,320	1,940	18.0
1986/87*	—	—	—	—	11,880	12,820	—	10,300	1,200	11,500	1,320	13.0-16.0
								Thou. tons				9/ $/ton
Soybean meal												
1981/82	—	—	—	—	24,634	24,797	—	17,714	6,908	24,622	175	183
1982/83	—	—	—	—	26,714	26,889	—	19,306	7,109	26,415	474	187
1983/84	—	—	—	—	22,756	23,230	—	17,615	5,360	22,975	255	188
1984/85*	—	—	—	—	24,529	24,784	—	19,480	4,917	24,397	387	125
1985/86*	—	—	—	—	24,957	25,344	—	19,125	6,007	25,132	212	155
1986/87*	—	—	—	—	25,488	25,700	—	19,500	5,900	25,400	300	140-150

See footnotes at end of table.

Table 17.— Supply and utilization, continued

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Mil. acres			lb/acre	Mil. bales							¢/lb
Cotton 10/												
1981/82	0	14.3	13.8	542	15.6	18.3	—	5.3	6.6	11.8	6.6	54.0
1982/83	1.6	11.3	9.7	590	12.0	18.6	—	5.5	5.2	10.7	7.9	59.1
1983/84	6.8	7.9	7.3	508	7.8	15.7	—	5.9	6.8	12.7	2.8	66.4
1984/85*	2.5	11.1	10.4	600	13.0	15.8	—	5.5	6.2	11.8	4.1	57.8
1985/86*	3.6	10.7	10.2	630	13.4	17.6	—	6.4	2.0	8.4	9.4	54.8
1986/87*	3.6	9.6	8.7	546	9.9	19.2	—	7.0	6.8	13.8	5.6	—

*November 10, 1986 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum. October 1 for soymeal, and soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, and acreage reduction programs. 4/ Includes imports. 5/ Season average. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Bob Skinner (202) 786-1840.

Table 18.—Food grains

	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	Sept	May	June	July	Aug	Sept
Wholesale prices										
Wheat, No. 1 HRW, Kansas City ($/bu.) 2/	3.94	3.83	3.74	3.28	3.07	3.40	2.80	2.50	2.48	2.53
Wheat, DNS, Minneapolis ($/bu.) 2/	3.95	4.21	3.70	3.25	2.97	3.05	2.51	2.17	2.39	2.64
Rice, S.W. La. ($/cwt.) 3/	18.00	19.38	17.98	16.11	17.50	12.67	12.75	12.42	10.63	10.25
Wheat										
Exports (mil. bu.)	1,509	1,429	1,424	915	78	51	86	110	124	104
Mill grind (mil. bu.)	656	694	676	707	60	59	58	61	66	n.a.
Wheat flour production (mil. cwt.)	292	308	301	317	27	26	26	27	29	n.a.
Rice										
Exports (mil. cwt, rough equiv.)	68.9	70.3	62.1	58.7	6.7	3.2	6.5	9.6	10.1	10.1

	Marketing year 1/			1985				1986		
	1983/84	1984/85	1985/86	Jan-Mar	Apr-May	June-Sept	Oct-Dec	Jan-Mar	Apr-May	Jun-Aug
Wheat										
Stocks, beginning (mil. bu.)	1,515	1,399	1,425	2,141	1,667	1,425.2	2,971.1	2,526.1	2,130.0	1,905.0
Domestic use:										
Food (mil. bu.)	643	651	678	165	105.8	223.7	176.8	166.9	110.7	174.0
Feed & seed (mil. bu.) 4/	469	502	371	4.4	-1.2	334.7	24.9	4.9	1.8	377.0
Exports (mil. bu.)	1,429	1,424	915	266	139.1	326.6	247.3	226.1	115.3	320.2

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. n.a. = not available.

Information contacts: Allen Schienbein and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	Sept	May	June	July	Aug	Sept
U.S. price, SLM, 1-1/16 in. (cts/lb.) 2/	63.1	73.1	60.5	60.0	56.4	64.0	65.2	65.7	26.8	33.6
Northern Europe prices:										
Index (cts./lb.) 3/	76.7	87.6	69.2	48.9	57.0	45.4	41.0	37.4	37.2	43.5
U.S. M 1-3/32" (cts./lb.) 4/	78.0	87.1	73.9	64.8	68.2	73.5	41.3	38.1	37.8	44.7
U.S. mill consumption (thou. bales)	5,512.8	5,883.5	5,517.3	6,496.5	480.1	527.0	515.9	546.4	559.6	551.5
Exports (thou. bales)	5,206.8	6,786.0	6,201.3	1,969.2	200.3	81.0	68.9	23.0	270.0	358.0
Stocks, beginning (thou. bales)	6,632	7,937	2,775	4,102	4,074	10,987	10,327	9,720	9,350	9,352

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook "A" index; average of five lowest priced of 10 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed grains

	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	Sept	May	June	July	Aug	Sept
Wholesale prices										
Corn, No. 2 yellow, Chicago ($/bu.)	2.98	3.46	2.79	2.35	2.31	2.55	2.52	1.98	1.68	1.49
Sorghum, No. 2 yellow, Kansas City ($/cwt.)	4.80	5.22	4.46	3.72	3.56	4.25	4.00	3.20	2.71	2.47
Barley, feed, Minneapolis ($/bu.)	1.76	2.48	2.09	1.53	1.40	1.31	1.23	1.16	1.13	1.27
Barley, malting, Minneapolis ($/bu.)	2.53	2.84	2.55	2.24	2.15	2.07	1.84	1.75	1.61	1.76
Exports										
Corn (mil. bu.)	1,834	1,902	1,865	1,241	81	48	57	45	52	81
Feed grains (mil. metric tons) 2/	53.0	56.5	56.6	36.6	2.8	1.5	1.7	1.6	1.8	2.7

	Marketing year 1/				1985			1986		
	1982/83	1983/84	1984/85	1985/86	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug p
Corn										
Stocks, beginning (mil. bu.)	2,537	3,523	1,006	1,648	4,623	2,836	1,648	8,615	6,587	4,989
Domestic use:	4,521	3,818	4,116	4,116	1,026	612	1,210	1,305	1,095	506
Feed (mil. bu.)	895	975	1,025	1,129	283	280	272	259	302	296
Food, seed, ind. (mil. bu.)	1,834	1,902	1,865	1,241	479	296	418	465	204	154
Exports (mil. bu.)	7,249	6,694	7,036	6,486	1,789	1,188	1,900	2,029	1,601	956
Total use (mil. bu.)										

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Aggregated data for corn, sorghum, oats, and barley.
p = preliminary.

Information contacts: Dave Hull (202) 786-1840; Jim Cole (202) 786-1693.

Table 21.—Fats and oils

	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	Sept	May	June	July	Aug	Sept
Soybeans										
Wholesale price, No. 1 yellow, Chicago ($/bu.) 2/	6.11	7.78	5.88	5.20	5.15	5.34	5.33	5.25	4.71	4.74
Crushings (mil. bu.)	1,107.8	982.7	1,030.5	1052.8	76.5	86.3	79.6	83.1	78.4	79.4
Exports (mil. bu.)	905.2	742.8	598.2	740.0	31.5	57.2	28.7	26.6	21.0	30.2
Stocks, beginning (mil. bu.)	254.5	344.6	175.7	316.0	26.7	67.6	53.2	40.7	40.2	28.5
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	20.62	30.55	29.52	18.0	29.52	17.79	16.22	14.28	14.28	13.94
Production (mil. lb.)	12,040.4	10,872.0	11,467.9	11,620.4	853.4	953.3	881.9	909.5	875.3	889.3
Domestic disap. (mil. lb.)	9,857.3	9,598.6	9,916.7	10,062.8	826.5	761.7	901.7	769.2	856.4	877.6
Exports (mil. lb.)	2,024.7	1,813.6	1,659.8	1,257.2	102.8	50.7	115.1	44.6	187.7	223.4
Stocks, beginning (mil. lb.)	1,102.5	1,260.9	720.5	632.5	715.7	1,219.3	1,360.2	1,225.2	1,320.8	1,152.2
Soybean meal										
Wholesale price, 44% protein, Decatur ($/ton)	187.19	188.21	125.46	154.90	130.60	157.90	158.90	161.00	163.50	165.20
Production (thou. ton)	26,713.6	22,756.2	24,529.3	24,957.8	1,800.6	2,036.7	1,879.4	1,976.6	1,863.4	1,878.7
Domestic disap. (thou. ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,460.0	1,677.0	1,430.2	1,600.6	1,428.8	1,644.6
Exports (thou. ton)	7,108.7	5,359.7	4,916.5	6,007.0	411.7	378.1	452.9	404.2	345.0	312.9
Stocks, beginning (thou. ton)	175.2	474.1	255.4	387.0	458.0	300.8	282.4	278.7	211.6	255.1
Margarine, wholesale price, Chicago, white (cts/lb.)	41.1	46.3	55.4	42.1	49.1	41.88	40.40	39.00	37.95	38.00

1/ Beginning September 1 for soybeans; October 1 for soymeal and oil; calendar year for margarine. 2/ Beginning April 1, 1982, prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1691.

Table 22.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 F
Citrus												
Production (thou. ton)	14,586	14,788	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,488	11,037 5/	12,425
Per capita consumption (lbs) 1/	119.5	117.8	118.8	108.1	108.8	113.1	104.7	110.0	120.7	103.2	115.4	n.a.
Non citrus												
Production (thou. tons)	12,384	11,846	12,274	12,460	13,689	15,153	12,961	14,217	14,154	14,290	14,180	n.a.
Per capita consumption (lbs) 1/	85.5	84.4	84.8	83.3	85.9	87.4	88.2	89.3	89.2	93.4	95.1	n.a.

	1985			1986								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Fob shipping point prices												
Apples ($/carton) 2/	14.50	14.30	14.00	13.60	15.00	14.85	15.62	18.10	18.50	22.86	n.a.	17.03
Pears ($/box) 3/	14.00	14.00	14.00	14.00	15.59	15.50	n.a.	24.18	25.70	n.a.	14.67	14.00
Oranges ($/box) 4/	4.87	6.01	4.88	4.27	3.71	3.85	3.79	4.19	4.27	3.63	4.03	4.34
Grapefruit ($/box) 4/	4.71	4.25	3.82	3.78	3.76	3.94	4.22	5.20	5.98	6.17	6.76	6.63
Stocks, ending												
Fresh apples (mil. lbs.)	3,668.3	3,342.5	2,724.7	2,125.2	1,550.2	1,039.3	612.6	267.2	118.8	25.4	7.9	2,349.5
Fresh pears (mil. lbs.)	298.9	222.2	183.2	142.9	101.3	71.6	35.5	4.9	.7	75.0	124.4	325.1
Frozen fruits (mil. lbs.)	819.9	788.9	720.7	656.5	597.1	544.6	496.9	461.4	558.1	719.6	741.1	739.6
Frozen orange juice (mil. lbs.)	778.8	656.0	684.4	888.4	966.8	911.5	1,031.6	1,047.5	1,056.9	920.3	855.3	728.9

1/ Per capita consumption of both fresh and processed fruit in fresh weight equivalent. Eighteen fruit items are not included in this year's new per capita consumption series. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 3/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 4/ U.S. equivalent on-tree returns. 5/ As of November 1, 1986. n.a. = not available. F = forecast.

Information contact: Ben Huang (202) 786-1767.

Table 23.—Vegetables

	Calendar years									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Production										
Total vegetables (1,000 cwt) 1/	369,915	402,936	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,651
Fresh (1,000 cwt) 1/ 2/	173,800	176,541	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,814
Processed (tons) 3/	9,808,750	11,319,750	9,980,100	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,791,860
Mushrooms (1,000 lbs)	347,129	398,703	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956
Potatoes (1,000 cwt)	357,666	355,334	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109
Sweetpotatoes (1,000 cwt)	13,272	11,885	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,416
Dry edible beans (1,000 cwt) 4/	9,364	7,880	9,840	10,383	14,649	19,486	12,670	7,781	11,617	11,207

	1985				1986								
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Shipments													
Fresh (1,000 cwt) 5/	15,002	18,318	14,708	14,021	22,189	16,643	17,454	19,210	32,927	26,825	27,818	17,579	15,174
Potatoes (1,000 cwt)	7,850	10,067	9,646	10,147	12,955	10,726	11,953	13,604	16,037	9,882	7,757	8,066	7,907
Sweetpotatoes (1,000 cwt)	332	492	817	504	352	313	413	227	250	177	160	96	246

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop, all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop, all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Production by class which include baby limas, Great Northern, Pinto, Red Kidney. 5/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons.

Information contact: Shannon Hamm (202) 786-1767.

Table 24.—Other commodities

	Annual					1985		1986		
	1982	1983	1984	1985	1986 F	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept
Sugar										
Production 1/	5,936	5,682	5,890	5,969	6,300	683	2,992	1,619	746	2,292
Deliveries 1/	9,153	8,812	8,454	8,035	7,800	2,150	2,004	1,834	1,919	1,431
Stocks, ending 1/	3,068	2,570	3,005	3,126	3,158	1,745	3,126	3,384	2,552	1,652
Coffee										
Composite green price N.Y. (cts./lb.)	132.00	131.51	142.95	137.46	182.50	124.83	152.81	215.33	190.79	174.92
Imports, green bean equiv. (million lbs.) 2/	2,352	2,259	2,411	2,550	2,600	652	612	799	653	635

	Annual			1985	1986					
	1983	1984	1985	July	Feb	Mar	Apr	May	June	July
Tobacco										
Prices at auctions 3/										
Flue-cured (dol./lb.)	1.78	1.81	1.72	1.51	n.q.	n.q.	n.q.	n.q.	n.q.	n.q.
Burley (dol./lb.)	1.77	1.88	1.59	n.q.	1.58	1.48	n.q.	n.q.	n.q.	n.q.
Domestic consumption 4/										
Cigarettes (bil.)	600.0	600.4	594.0	42.1	43.2	51.5	48.0	52.4	56.0	38.4
Large cigars (mil.)	3,605	3,493	3,226	238.1	198.9	227.4	257.0	279.4	281.2	270.4

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. F = forecast. n.q. = no quote.

Information contacts: (sugar) Dave Harvey (202) 786-1769; (coffee) Fred Gray (202) 786-1769; (tobacco) Verner Grise (202) 786-1840.

Table 25.—World supply and utilization of major crops, livestock and products

	1980/81	1981/82	1982/83	1983/84	1984/85 E	1985/86 P	1986/87 F
				Mil. units			
Wheat							
Area (hectare)	237.0	238.7	237.7	229.1	231.3	229.2	228.5
Production (metric ton)	443.0	449.5	477.5	489.5	511.3	499.1	513.6
Exports (metric ton) 1/	94.1	101.3	98.7	102.0	106.9	85.0	86.6
Consumption (metric ton) 2/	445.8	443.6	462.2	482.3	495.1	488.3	507.4
Ending stocks (metric ton) 3/	78.2	87.0	102.3	109.6	125.7	136.6	142.8
Coarse grains							
Area (hectare)	342.4	349.9	339.7	335.3	335.3	337.8	334.7
Production (metric ton)	732.9	766.0	784.4	687.7	813.5	847.5	830.4
Exports (metric ton) 1/	108.0	96.6	89.9	91.9	100.6	83.8	84.8
Consumption (metric ton) 2/	745.1	737.7	752.6	762.2	783.4	776.8	786.4
Ending stocks (metric ton) 3/	90.6	120.7	152.5	77.9	108.0	178.8	222.8
Rice, milled							
Area (hectare)	144.5	145.2	141.1	144.3	144.5	143.9	144.7
Production (metric ton)	271.0	280.6	285.7	308.0	319.3	316.8	318.2
Exports (metric ton) 4/	13.1	11.8	11.9	12.6	11.5	12.6	11.9
Consumption (metric ton) 2/	272.3	281.5	289.6	308.1	314.5	315.7	320.2
Ending stocks (metric ton) 3/	22.1	21.3	17.3	17.2	22.1	23.1	21.1
Total grains							
Area (hectare)	723.9	733.8	718.5	708.7	711.1	710.9	707.9
Production (metric ton)	1,446.9	1,496.1	1,547.6	1,485.2	1,644.1	1,663.4	1,661.8
Exports (metric ton) 1/	215.2	209.7	200.5	206.5	219.0	181.4	183.3
Consumption (metric ton) 2/	1,463.2	1,462.8	1,504.4	1,552.6	1,593.0	1,580.8	1,614.0
Ending stocks (metric ton) 3/	190.9	229.0	272.1	204.7	255.8	338.5	386.7
Oilseeds							
Crush (metric ton)	132.9	138.3	143.6	137.1	151.2	154.9	156.4
Production (metric ton)	155.8	169.4	178.3	165.7	190.9	195.7	197.6
Exports (metric ton)	32.1	35.8	35.1	33.0	32.8	33.9	35.5
Ending stocks (metric ton)	20.5	18.9	20.5	15.8	20.9	25.9	29.8
Meals							
Production (metric ton)	90.8	94.1	98.1	93.1	101.9	104.5	106.0
Exports (metric ton)	25.9	28.9	31.5	29.6	32.5	33.3	33.6
Oils							
Production (metric ton)	40.0	41.6	43.4	42.5	46.4	49.3	49.9
Exports (metric ton)	12.5	13.3	14.0	13.6	15.5	16.7	16.6
Cotton							
Area (hectare)	32.1	33.0	31.4	31.0	33.9	32.0	30.7
Production (bale)	65.0	71.2	68.0	67.7	88.1	78.9	72.1
Exports (bale)	19.7	20.2	19.4	19.2	20.4	20.5	23.1
Consumption (bale)	65.8	66.0	68.1	68.5	69.8	74.7	77.1
Ending stocks (bale)	21.1	25.9	25.0	25.0	43.0	48.0	42.4
	1981	1982	1983	1984	1985	1986 F	1987 F
Red meat							
Production (mil. metric tons)	93.6	93.9	96.5	98.1	101.8	102.2	102.5
Consumption (mil. metric tons)	91.8	92.2	94.7	96.1	99.6	100.7	100.9
Exports (mil. metric tons) 1/	5.7	5.8	5.8	5.9	6.3	6.1	6.4
Poultry							
Production (mil. metric tons)	22.4	23.0	23.5	24.2	25.2	26.1	27.3
Consumption (mil. metric tons)	22.1	22.7	23.5	24.0	24.9	25.7	26.9
Exports (mil. metric tons) 1/	1.5	1.4	1.3	1.2	1.2	1.2	1.2
Dairy							
Milk production	389.7	397.9	413.1	413.1	417.4	420.8	n.a.

E = Estimated. P = Projected. F = Forecast. 1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1981 data correspond with 1980/81, etc. n.a. = not available.

Information contact: Frederic Surls (202) 786-1693.

Table 26.—Prices of principal U.S. agricultural trade products

	Annual			1985	1986					
	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu.)	4.30	4.17	3.73	3.47	3.76	3.49	2.92	2.80	2.82	2.83
Corn, f.o.b. vessel, Gulf ports ($/bu.)	3.49	3.50	2.89	2.62	2.59	2.70	2.69	2.17	1.89	1.71
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu.)	3.34	3.00	2.64	2.12	2.56	2.71	2.37	1.94	1.70	1.73
Soybeans, f.o.b. vessel, Gulf ports ($/bu.)	7.31	7.38	5.83	5.44	5.57	5.59	5.53	5.45	5.38	5.37
Soybean oil, Decatur (cts./lb.)	23.51	30.75	27.03	22.41	17.64	17.72	16.75	16.21	14.16	13.84
Soybean meal, Decatur ($/ton)	200.91	166.80	127.15	130.93	156.72	157.60	158.55	162.15	164.76	166.19
Cotton, B market avg. spot (cts./lb.)	68.68	68.37	58.55	56.38	62.62	63.95	65.24	65.73	26.81	33.56
Tobacco, avg. price at auction (cts./lb.)	173.96	170.66	172.05	175.15	158.59	158.01	158.01	158.01	142.95	151.92
Rice, f.o.b. mill, Houston ($/cwt.)	19.39	19.47	18.57	18.25	17.25	13.75	13.60	13.00	13.00	13.00
Inedible tallow, Chicago (cts./lb.)	13.41	17.47	14.33	11.40	8.94	8.72	7.56	7.78	7.81	8.10
Import commodities										
Coffee, N.Y. spot ($/lb.)	1.33	1.46	1.42	1.33	2.28	2.18	1.93	1.88	1.85	2.03
Rubber, N.Y. spot (cts./lb.)	56.19	49.70	41.91	43.24	39.18	40.10	41.06	43.5½	43.45	45.29
Cocoa beans, N.Y. ($/lb.)	.92	1.06	.99	1.01	.85	.81	.81	.88	.89	.96

Information contact: Mary Teymourian (202) 786-1691.

Table 27.—Indexes of nominal and real trade-weighted dollar exchange rates

	1985		1986									
	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
						1980=100						
Total U.S. trade												
Nominal	137	136	134	129	126	125	123	124	n.a.	n.a.	n.a.	n.a.
Real	138	137	135	130	127	126	124	125	n.a.	n.a.	n.a.	n.a.
						April 1971=100						
Agricultural trade												
Nominal 1/	3,083	3,183	3,544	4,093	4,495	4,500	4,511	4,498	4,567	4,661	4,680	4,729
Real 2/	99	91	90	88	86	85	84*	85*	85*	86*	87	87*
Soybeans												
Nominal 1/	229	114	112	107	105	105	103	103	161	250	266	280
Real 2/	91	84	82	79	76	76	74*	75*	75*	75*	75*	75*
Wheat												
Nominal 1/	17,029	18,368	20,580	23,953	26,425	26,457	26,533	26,449	26,499	26,501	26,512	26,714
Real 2/	109	103	102	102	102	101	100*	101*	99*	100*	100*	101*
Corn												
Nominal 1/	2,865	2,903	3,227	3,720	4,081	4,086	4,095	4,083	4,172	4,297	4,320	4,369
Real 2/	96	86	85	81	79	78	77*	77*	78*	79*	79	79*
Cotton												
Nominal 1/	215	216	216	214	228	227	226	233	231	230	233	236
Real 2/	97	97	97	95	94	93	92*	92*	91*	90*	91	91*

1/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 2/ Real values are computed in the same way as the nominal series, adjusted for CPI changes in the countries involved.

n.a. = not available.

*Preliminary; assumes the same rate of CPI increase/decrease as the previous six months.

Information contact: Edward Wilson (202) 786-1688.

Table 28.—Trade balance

	Fiscal years*								Oct-Sept	Sept
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1986
						$ Million				
Exports										
Agricultural	27,289	31,979	40,481	43,780	39,095	34,769	38,027	31,201	26,325	1,915
Nonagricultural	104,270	135,839	169,846	185,423	176,310	159,373	170,014	179,236	176,613	14,945
Total 1/	131,559	167,818	210,327	229,203	215,405	194,142	208,041	210,437	202,938	16,860
Imports										
Agricultural	13,886	16,186	17,276	17,218	15,481	16,271	18,916	19,740	20,875	1,608
Nonagricultural	152,095	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	27,096
Total 2/	165,981	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	28,704
Trade balance										
Agricultural	13,403	15,793	23,205	26,562	23,614	18,498	19,111	11,461	5,450	307
Nonagricultural	-47,825	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-166,242	-12,151
Total	-34,422	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,792	-11,844

*Fiscal years begin October 1 and end September 30. Fiscal year 1985 began Oct. 1, 1984 and ended Sept. 30, 1985.
1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).

Information contact: Steve MacDonald (202) 786-1621.

Table 29.—U.S. agricultural exports and imports

	Fiscal years*			Oct-Sept*	Sept	Fiscal years*			Oct-Sept*	Sept
	1983	1984	1985	1986	1986	1983	1984	1985	1986	1986
	Thousand units					$ Million				
Exports										
Animals, live (no.)	763	754	996	570	40	264	276	255	344	53
Meats & preps., excl. poultry (mt)	412	422	427	451	48	926	929	906	1,012	99
Dairy products (mt)	339	418	423	481	38	349	393	414	430	39
Poultry meats (mt)	250	225	234	265	24	281	280	257	282	27
Fats, oils, & greases (mt)	1,443	1,395	1,217	1,355	82	593	703	608	477	24
Hides & skins incl. furskins	---	---	---	---	--	997	1,318	1,325	1,456	109
Cattle hides, whole (no.)	21,989	24,283	25,456	25,973	2,080	709	1,010	1,019	1,150	94
Mink pelts (no.)	2,446	2,551	2,237	2,697	91	62	67	60	65	2
Grains & feeds (mt)	102,016	108,194	93,903	74,437	6,756	15,050	17,304	13,285	9,476	753
Wheat (mt)	36,701	41,699	28,523	25,490	2,669	5,910	6,497	4,264	3,259	295
Wheat flour (mt)	1,529	1,071	718	1,137	94	256	234	164	204	15
Rice (mt)	2,276	2,293	1,972	2,382	434	874	897	677	648	82
Feed grains, excl.products (mt)	53,481	55,285	55,061	36,031	2,675	6,496	8,129	6,792	3,745	212
Feeds & fodders (mt)	7,171	7,021	6,533	8,381	805	1,193	1,216	1,004	1,289	123
Other grain products (mt)	859	825	1,096	1,015	79	321	331	385	332	27
Fruits, nuts, and preps. (mt)	2,120	1,931	1,907	2,003	136	1,660	1,594	1,687	1,766	136
Fruit juices incl. froz. (hl)	5,803	5,598	4,641	3,652	370	222	223	200	148	13
Vegetables & preps. (mt)	1,578	1,527	1,420	1,467	102	990	999	946	1,000	69
Tobacco, unmanufactured (mt)	245	227	257	224	10	1,487	1,433	1,588	1,318	60
Cotton, excl. linters (mt)	1,136	1,481	1,277	482	81	1,683	2,395	1,945	678	78
Seeds (mt)	275	252	289	269	20	333	326	352	366	23
Sugar, cane or beet (mt)	141	285	355	375	52	38	74	65	75	12
Oilseeds & products (mt)	34,322	26,961	23,803	27,557	1,313	8,721	8,602	6,195	6,266	311
Oilseeds (mt)	26,039	20,466	17,886	20,684	850	6,332	6,254	4,324	4,394	175
Soybeans (mt)	24,522	19,265	16,621	20,139	822	5,866	5,734	3,876	4,174	164
Protein meal (mt)	6,688	5,060	4,606	5,588	312	1,486	1,217	853	1,127	63
Vegetable oils (mt)	1,596	1,435	1,311	1,284	151	902	1,131	1,018	746	72
Essential oils (mt)	10	11	12	7	1	88	96	105	105	7
Other	---	---	---	--	--	1,087	1,082	1,069	1,125	104
Total	---	---	---	--	--	34,769	38,027	31,201	26,325	1,915
Imports										
Animals, live (no.)	1,553	1,907	2,120	1,885	88	555	596	569	637	36
Meats & preps., excl. poultry (mt)	938	905	1,123	1,139	105	2,092	1,931	2,214	2,248	213
Beef & veal (mt)	661	550	674	693	66	1,387	1,165	1,295	1,252	117
Pork (mt)	251	328	416	406	37	638	703	847	900	88
Dairy products (mt)	299	382	418	400	45	709	757	763	786	74
Poultry and products	—	—	—	—	--	91	122	93	101	11
Fats, oils, & greases (mt)	11	18	21	22	2	7	13	18	17	2
Hides & skins, incl. furskins	—	—	—	—	—	191	216	240	200	12
Wool, unmanufactured (mt)	38	59	43	53	4	124	193	145	160	12
Grains & feeds (mt)	1,611	1,805	2,070	2,311	118	448	534	604	668	53
Fruits, nuts, & preps.,										
excl. juices (mt)	3,597	4,036	4,483	4,637	311	1,386	1,634	1,891	1,976	148
Bananas & plantains (mt)	2,516	2,727	3,022	3,042	236	585	666	752	740	59
Fruit juices (hl)	22,166	27,247	35,112	31,539	2,183	479	671	995	698	40
Vegetables & preps. (mt)	1,693	2,093	2,140	2,199	110	1,138	1,314	1,347	1,560	78
Tobacco, unmanufactured (mt)	239	190	191	208	18	734	563	556	606	52
Cotton, unmanufactured (mt)	8	32	31	41	1	7	17	17	14	0
Seeds (mt)	85	82	92	89	6	91	97	91	111	10
Nursery stock & cut flowers	—	--	—	—	--	228	292	318	353	40
Sugar, cane or beet (mt)	2,564	2,829	2,338	1,905	144	974	1,144	912	654	44
Oilseeds & products (mt)	1,021	1,137	1,271	1,508	106	493	799	784	639	35
Oilseeds (mt)	185	223	253	197	12	80	95	98	69	4
Protein meal (mt)	87	118	159	138	13	14	21	17	15	2
Vegetable oils (mt)	749	797	859	1,173	81	399	683	670	555	30
Beverages excl. fruit juices (hl)	12,426	14,120	15,494	15,488	1,373	1,346	1,547	1,622	1,848	153
Coffee, tea, cocoa, spices (mt)	1,701	1,776	1,868	1,940	155	3,984	4,777	4,983	6,099	476
Coffee, incl. products (mt)	1,061	1,128	1,128	1,223	101	2,832	3,300	3,244	4,400	360
Cocoa beans & products (mt)	464	451	539	507	37	829	1,058	1,285	1,189	84
Rubber & allied gums (mt)	654	809	799	801	65	582	854	680	615	51
Other	--	--	--	--	--	717	844	900	885	67
Total	--	--	--	--	--	16,373	18,916	19,740	20,875	1,608

*Fiscal years begin October 1 and end September 30. Fiscal year 1985 began Oct. 1, 1984 and ended Sept. 30, 1985. -- Not available.

Information contact: Steve MacDonald (202) 786-1621.

Table 30. U.S. agricultural exports by regions

Region & country	Fiscal years*			Oct-Sept*	Sept	Change from year* earlier			Oct-Sept	Sept
	1983	1984	1985	1986	1986	1983	1984	1985	1986	1986
			$ Mil.					Percent		
Western Europe	10,148	9,265	7,183	6,857	462	-17	-9	-22	-5	-2
European Community (EC-10)	9,465	8,650	6,668	6,442	424	-17	9	-23	-3	-1
Belgium-Luxembourg	811	836	470	361	22	-13	3	-44	-23	-45
France	517	510	396	431	29	-22	-1	-22	9	11
Germany, Fed. Rep.	1,454	1,260	900	1,001	54	-8	-13	-29	11	4
Italy	799	771	677	693	41	-23	-4	-12	2	81
Netherlands	2,821	2,227	1,926	2,042	136	-14	-21	-14	6	5
United Kingdom	821	790	628	628	50	-13	-4	-20	0	10
Portugal	638	702	502	308	18	9	10	-28	-39	-42
Spain, incl. Canary Islands	1,199	1,232	832	723	43	-37	3	-32	-13	-16
Other Western Europe	682	615	515	415	37	-14	-10	-16	-19	-6
Switzerland	355	311	232	128	8	5	-12	-26	-45	10
Eastern Europe	827	741	532	447	21	-10	-10	-28	-16	-13
Germany Dem. Rep.	123	132	81	52	4	-46	7	-39	-36	976
Poland	232	197	126	42	3	29	-15	-36	-66	-43
Yugoslavia	249	180	137	134	11	39	-28	-24	-2	57
Romania	115	155	88	112	0	-21	35	-43	27	-100
USSR	983	2,512	2,525	1,105	0	-58	156	1	-56	-94
Asia	13,588	15,209	11,933	10,498	790	-4	12	-22	-12	1
West Asia (Mideast)	1,482	1,865	1,452	1,243	98	0	26	-22	-14	2
Turkey	28	222	129	111	0	-74	693	-42	-13	-63
Iraq	323	423	371	321	20	139	31	-12	-14	-36
Israel	293	351	300	255	12	-14	20	-15	-15	-20
Saudia Arabia	446	497	381	335	51	-6	11	-23	-12	124
South Asia	1,170	867	599	517	68	64	-26	-31	-14	90
Bangladesh	153	157	205	94	14	25	3	31	-54	27
India	762	376	129	90	13	146	-51	-66	-30	28
Pakistan	215	285	228	285	32	-2	33	-20	25	114
East & Southeast Asia	10,936	12,477	9,882	8,739	624	-8	14	-21	-12	-4
China	546	692	239	88	2	-70	27	-65	-63	-91
Taiwan	1,237	1,409	1,342	1,108	66	6	14	-5	-17	-24
Japan	5,888	6,935	5,663	5,139	371	3	18	-18	-9	3
Korea, Rep.	1,713	1,816	1,400	1,277	96	7	6	-23	-9	-2
Hong Kong	344	407	396	399	31	-15	18	-3	1	6
Indonesia	410	438	204	172	15	-5	7	-53	-16	189
Philippines	380	300	285	270	17	19	-21	-5	-5	-45
Africa	2,272	2,868	2,527	2,135	169	-7	26	-12	-16	9
North Africa	1,452	1,542	1,207	1,402	92	4	6	-22	16	19
Morocco	225	341	156	159	28	33	52	-54	2	99
Algeria	203	162	220	330	21	-8	-20	36	50	189
Egypt	911	882	766	875	33	1	-3	-13	14	-38
Sub-Sahara	821	1,327	1,320	733	78	-22	62	-1	-44	-1
Nigeria	332	345	367	158	20	-38	4	6	-57	21
Rep. S. Africa	130	525	189	70	7	-2	304	-64	-63	44
Latin America & Caribbean	4,858	5,279	4,570	3,599	299	-2	9	-13	-21	-1
Brazil	400	438	557	444	59	-31	10	27	-20	146
Caribbean Islands	774	827	771	752	59	1	7	-7	-2	-9
Central America	356	396	361	334	43	4	11	-9	-7	23
Colombia	256	220	238	137	11	-6	-14	8	-42	-44
Mexico	1,777	1,966	1,566	1,115	72	19	11	-20	-29	29
Peru	258	227	106	108	18	-17	-12	-53	2	15
Venezuela	617	778	721	493	18	-17	26	-7	-32	-67
Canada	1,870	1,936	1,727	1,466	149	0	4	-11	-15	10
Oceania	224	216	204	216	25	-24	-4	-6	6	151
Total	34,769	38,027	31,201	26,325	1,915	-11	9	-18	-16	2

*Fiscal years begin October 1 and end September 30. Fiscal year 1985 began Oct. 1, 1984 and ended Sept. 30, 1985.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1621.

Table 31.—Farm income statistics

	Calendar years										
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 p	1986 F
	Billion dollars										
1. Farm receipts	96.4	97.5	114.3	133.8	142.0	144.1	147.1	140.9	146.4	148.5	135 to 139
Crops (incl. nat CCC loans)	49.0	48.6	53.2	62.3	71.7	72.5	72.4	67.0	69.2	72.7	59 to 63
Livestock	46.3	47.6	59.2	69.2	68.0	69.2	70.2	69.5	72.9	69.4	69 to 73
Farm related 1/	1.1	1.2	1.9	2.2	2.3	2.5	4.5	4.4	4.3	6.4	4 to 6
2. Direct Government payments	0.7	1.8	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11 to 14
Cash payments	0.7	1.8	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8 to 10
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3 to 5
3. Total gross farm income (4+5+6)	102.9	108.8	128.4	150.7	149.3	166.3	163.4	152.4	174.4	166.6	155 to 159
4. Gross cash income (1+2) 2/	97.2	99.3	117.3	135.1	143.3	146.0	150.6	150.2	154.9	156.2	148 to 152
5. Nonmoney income 3/	7.3	8.4	9.3	10.6	12.3	13.8	14.1	13.2	13.3	11.5	9 to 11
6. Value of inventory change	-1.5	1.1	1.9	5.0	-6.3	6.5	-1.3	-10.9	6.3	-1.1	-5 to -1
7. Cash expenses 4/	67.2	71.4	84.2	101.7	109.1	113.2	113.8	113.0	115.6	112.1	104 to 108
8. Total expenses	82.7	88.9	103.2	123.3	133.1	139.4	140.7	139.5	141.7	136.1	127 to 131
9. Net cash income (4-7)	29.9	27.8	33.1	33.4	34.2	32.8	36.8	37.1	39.3	44.0	42 to 46
10. Net farm income (3-8)	20.2	19.9	25.2	27.4	16.1	26.9	22.7	13.0	32.7	30.5	26 to 30
Deflated (1982$)	32.0	29.5	34.9	34.9	18.8	28.6	22.7	12.5	30.3	27.3	23 to 26
11. Off-farm income	26.7	26.1	29.7	33.8	34.7	35.8	36.4	37.0	37.9	40.8	41 to 45
12. Loan changes 5/: Real estate	5.2	7.6	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-7 to -3
13. 5/: Nonreal estate	5.9	6.8	8.3	10.9	5.9	6.2	3.4	1.0	-0.8	-9.2	-8 to -4
14. Rental income plus monetary change	3.5	3.5	4.1	6.3	6.1	6.4	6.4	5.7	7.8	8.0	5 to 8
15. Capital expenditures 5/	14.0	15.0	17.9	19.9	18.0	16.8	13.7	13.0	12.5	10.1	7 to 10
16. Net cash flow (9+12+13+14-15)	30.5	30.8	35.1	43.7	37.5	37.9	37.0	33.3	33.0	27.1	29 to 33

p = preliminary. F = Forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households.

Information contact: Gary Lucier (202) 786-1807.

Table 32.—Balance sheet of the U.S. farming sector

	Calendar years										
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 p	1986 F
	Billion dollars										
Assets	453.5	507.7	600.7	704.2	779.2	780.2	745.6	736.1	639.6	559.6	490-530
Real estate 1/	136.9	149.0	183.0	213.9	224.0	225.0	232.2	220.4	216.5	211.9	180-220
Non-real estate	29.0	31.9	51.3	61.4	60.6	53.5	53.0	49.7	49.6	45.9	42-46
Livestock & poultry	63.9	69.9	78.2	90.8	96.8	103.0	103.7	100.9	95.0	92.2	87-91
Machinery & motor vehicles	22.1	24.8	28.0	33.5	36.5	36.1	40.6	33.2	33.7	37.1	28-32
Crops stored	21.9	22.4	25.5	28.2	30.1	32.4	34.9	36.5	38.1	36.7	33-37
Financial assets	590.4	656.7	783.7	918.1	1,003.2	1,005.2	977.8	956.5	856.1	771.4	690-730
Total farm assets											
Liabilities	50.3	58.0	65.6	78.5	87.9	97.2	101.2	103.7	102.9	97.3	90-94
Real estate	46.6	52.4	66.4	7.0	82.5	91.6	102.4	98.7	95.8	94.8	92-96
Non-real estate	1.0	4.5	5.7	5.1	5.0	8.0	15.4	10.8	8.7	16.9	20-24
CCC loans	45.6	52.4	60.7	71.6	77.5	83.6	87.0	87.9	87.1	77.9	70-74
Other non-real estate	97.0	114.9	131.9	155.2	170.4	188.8	203.6	202.4	198.7	192.1	184-188
Total farm liabilities	493.5	541.8	651.8	762.9	832.9	816.4	774.2	754.0	657.3	579.3	500-540
Total farm equity											
	Percent										
Selected ratios	15.7	16.7	16.2	16.4	16.5	18.8	20.8	21.2	23.2	24.9	24-28
Debt-to-assets	18.6	20.0	19.3	19.6	19.7	23.1	26.3	26.8	30.2	33.2	34-38
Debt-to-equity	324.4	411.8	398.5	464.7	498.3	576.1	553.0	545.5	506.1	436.2	395-435
Debt-to-net cash income											

1/ Excludes farm household. p = preliminary. F = forecast.

Information contact: Richard Kodl (202) 786-1808.

Table 33.—Cash receipts from farm marketings, by States

State	Livestock and Products				Crops 1/				Total 1/			
	1984	1985	July 1986	Aug 1986	1984	1985	July 1986	Aug 1986	1984	1985	July 1986	Aug 1986
						$ Mil. 2/						
North Atlantic												
Maine	284	250	22	21	167	127	8	11	451	378	30	32
New Hampshire	77	71	6	6	33	36	2	3	110	107	8	8
Vermont	372	352	27	29	30	32	4	1	402	384	31	30
Massachusetts	131	124	11	10	258	265	14	22	389	389	24	32
Rhode Island	14	13	1	1	48	49	3	2	62	63	4	3
Connecticut	220	206	18	18	125	110	8	8	346	316	27	26
New York	1,921	1,845	149	148	745	719	56	98	2,666	2,564	205	246
New Jersey	135	144	12	12	404	447	71	60	538	591	83	71
Pennsylvania	2,242	2,184	177	180	848	966	61	86	3,090	3,150	238	266
North Central												
Ohio	1,626	1,511	133	131	1,989	2,430	131	96	3,614	3,940	264	227
Indiana	1,801	1,728	155	167	2,426	2,869	97	46	4,228	4,597	251	213
Illinois	2,173	2,063	169	180	4,482	5,704	246	169	6,655	7,768	416	349
Michigan	1,298	1,231	102	109	1,496	1,619	159	88	2,793	2,850	261	197
Wisconsin	4,075	4,100	354	350	878	1,012	61	74	4,953	5,111	415	424
Minnesota	3,360	3,370	276	283	2,728	3,102	105	117	6,088	6,472	382	400
Iowa	5,015	4,811	399	463	3,924	4,390	106	82	8,939	9,201	505	544
Missouri	2,166	1,930	142	151	1,530	1,738	50	45	3,696	3,668	192	196
North Dakota	693	686	33	40	1,839	2,060	45	103	2,532	2,746	78	144
South Dakota	1,804	1,903	107	119	1,021	1,076	64	117	2,826	2,979	171	235
Nebraska	4,524	4,113	311	349	2,510	3,093	123	80	7,035	7,206	434	430
Kansas	3,614	3,264	264	304	2,406	2,478	188	108	6,020	5,741	451	412
Southern												
Delaware	383	352	43	45	143	137	7	14	527	490	50	59
Maryland	810	770	77	78	369	378	21	17	1,179	1,148	98	95
Virginia	1,121	1,004	87	89	665	623	33	34	1,786	1,627	120	123
West Virginia	183	192	14	16	43	49	2	7	225	241	16	23
North Carolina	1,941	1,934	191	202	2,253	1,980	32	202	4,194	3,914	222	404
South Carolina	427	415	35	41	736	618	32	62	1,164	1,033	68	102
Georgia	1,848	1,727	174	189	1,772	1,600	50	114	3,620	3,327	224	303
Florida	1,091	1,015	97	98	3,642	3,726	201	137	4,733	4,741	297	235
Kentucky	1,415	1,352	281	74	1,288	1,519	17	17	2,703	2,871	299	92
Tennessee	1,054	1,000	78	83	1,051	1,057	27	27	2,105	2,057	105	111
Alabama	1,388	1,301	131	132	803	776	19	17	2,192	2,077	150	149
Mississippi	1,046	1,010	95	107	1,118	1,126	-16	-53	2,164	2,136	78	53
Arkansas	1,885	1,825	223	219	1,400	1,455	-40	-8	3,285	3,280	182	209
Louisiana	480	491	50	53	1,147	968	5	25	1,627	1,460	55	78
Oklahoma	1,776	1,726	167	188	879	938	107	57	2,655	2,664	274	245
Texas	5,901	5,441	466	514	3,569	3,857	218	312	9,470	9,298	684	826
Western												
Montana	717	802	46	35	649	405	12	43	1,366	1,207	58	78
Idaho	901	862	58	71	1,383	1,200	32	75	2,284	2,063	89	146
Wyoming	472	479	21	27	114	110	4	14	586	589	25	41
Colorado	2,205	2,019	137	164	1,141	1,145	91	83	3,345	3,164	228	247
New Mexico	657	718	43	46	334	369	34	31	991	1,086	76	77
Arizona	753	702	56	50	900	827	29	-6	1,654	1,529	85	43
Utah	449	409	33	31	139	138	14	12	588	548	47	43
Nevada	172	144	9	14	79	78	5	5	251	222	14	19
Washington	1,031	932	71	78	2,100	1,865	121	159	3,132	2,797	192	237
Oregon	630	622	46	52	1,216	1,156	128	117	1,846	1,778	175	169
California	4,529	4,165	318	292	9,944	9,805	699	647	14,473	13,970	1,017	938
Alaska	7	8	1	1	16	18	2	2	25	26	2	3
Hawaii	87	83	7	7	463	458	41	41	550	540	47	48
United States	72,905	69,401	5,922	6,067	69,248	72,702	3,526	3,615	142,153	142,103	9,449	9,682

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 34.—Cash receipts from farming

	Annual						1985	1986				
	1980	1981	1982	1983	1984	1985	Aug	Apr	May	June	July	Aug
						$ Mil.						
Farm marketings and CCC loans 1/	139,736	141,616	142,624	136,460	142,153	142,103	10,602	9,664	8,819	8,880	9,449	9,682
Livestock and products	67,991	69,151	70,249	69,453	72,905	69,401	5,528	5,598	5,800	5,518	5,922	6,067
Meat animals	41,233	39,748	40,917	38,893	40,832	38,185	2,935	3,064	3,151	2,938	2,872	3,232
Dairy products	16,365	18,095	18,234	18,757	17,944	18,135	1,504	1,521	1,597	1,509	1,494	1,487
Poultry and eggs	9,160	9,949	9,538	10,003	12,219	11,196	967	895	928	937	1,212	1,220
Other	1,233	1,358	1,560	1,800	1,910	1,885	123	118	124	134	344	128
Crops	71,746	72,465	72,375	67,007	69,248	72,702	5,074	4,066	3,020	3,362	3,526	3,615
Food grains	10,402	11,619	11,469	9,733	9,578	8,846	1,252	197	118	444	669	642
Feed crops	18,308	17,770	17,404	15,367	15,728	21,397	1,144	998	683	629	594	605
Cotton (lint and seed)	4,447	4,055	4,454	3,711	3,270	3,800	89	25	-28	-26	-63	-106
Tobacco	2,672	3,250	3,342	2,768	2,841	2,722	366	34	0	0	6	298
Oil-bearing crops	15,493	13,853	13,812	13,530	13,861	12,237	406	775	92	453	440	378
Vegetables and melons	7,307	8,772	8,113	8,512	9,237	8,582	878	805	1,102	821	626	835
Fruits and tree nuts	6,557	6,603	6,821	6,062	6,787	6,812	504	306	356	602	805	528
Other	6,560	6,543	6,960	7,526	7,946	8,306	436	925	699	439	449	436
Government payments	1,286	1,932	3,492	9,295	8,430	7,704	294	1,950	1,701	1,188	-99	179
Total	141,022	143,548	146,116	145,755	150,583	149,807	10,896	11,614	10,520	10,068	9,350	9,861

1/ Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Farm production expenses

	Calendar years									
	1976	1977	1978	1979	1980	1981	1982	1983	1984 r	1985 p
						Million dollars 1/				
Feed	14,370	13,967	16,036	19,314	20,971	20,855	18,592	21,725	19,850	19,588
Livestock	5,884	7,072.	10,150	13,012	10,670	8,999	9,696	8,814	9,498	8,991
Seed	2,366	2,484	2,638	2,904	3,220	3,428	3,172	2,987	3,447	3,369
Farm-origin inputs	22,620	23,523	28,824	35,230	34,861	33,282	31,460	33,526	32,795	31,948
Fertilizer	6,468	6,529	6,619	7,369	9,490	9,409	8,018	7,067	7,429	7,258
Fuels and oils	3,966	4,356	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584
Electricity	858	1,069	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,073
Pesticides	2,108	1,938	2,656	3,436	3,539	4,201	4,282	4,161	4,768	4,965
Manufactured inputs	13,400	13,892	15,273	17,887	22,434	23,927	22,229	20,877	21,506	20,881
Short-term interest	3,574	4,203	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821
Real estate interest	3,785	4,329	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878
Total interest charges	7,359	8,532	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,699
Repair and operation	4,879	5,430	6,638	7,280	7,648	7,587	7,730	7,543	7,850	7,450
Hired labor	6,743	7,131	8,279	8,982	9,294	8,932	10,182	9,660	9,838	10,347
Machine hire and custom work	1,546	1,682	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,185
Dairy deduction 1/	0	0	0	0	0	0	0	633	656	168
Other operating expenses	5,461	6,129	7,703	9,047	9,377	9,865	10,699	10,649	10,860	11,519
Total operating expenses	18,629	20,372	24,396	27,732	28,142	28,368	30,636	30,381	31,374	31,669
Depreciation	13,778	15,493	16,963	19,345	21,474	23,573	23,886	23,491	23,020	21,101
Taxes	3,491	3,660	3,603	3,871	3,891	4,246	4,394	4,323	4,384	4,423
Net rent to non-operator landlord	3,465	3,412	3,963	6,182	6,075	6,184	6,219	5,441	7,504	7,387
Other overhead expenses	20,734	22,565	24,529	29,398	31,440	36,003	34,499	33,255	34,908	32,911
Total production expenses	82,742	88,884	103,249	123,305	133,138	139,444	140,654	139,468	141,712	136,108

1/ Totals may not add due to rounding. r = revised. p = preliminary.

Information contact: Richard Kodl (202) 786-1808.

Transportation

Table 36.—Rail rates; grain and fruit-vegetable shipments; truck costs

	Annual			1985	1986					
	1983	1984	1985	Sept	Apr	May	June	July	Aug	Sept
Rail freight rate index 1/ (Dec 1984 = 100)										
All products	95.0	99.3	100.0	100.0	101.0	100.8	100.9 p	101.1 p	101.0 p	100.8 p
Farm products	94.0	98.7	99.0	98.9	99.7	99.8	100.3 p	100.2 p	99.6 p	99.6 p
Grain	94.0	98.6	98.3	98.0	99.1	99.2	99.1 p	99.1 p	99.1 p	99.2 p
Food products	94.8	99.1	100.1	100.1	100.9	99.6	100.9 p	100.9 p	100.9 p	99.6 p
Grain										
Rail carloadings (thou. cars) 2/	26.1	27.2	22.6	18.8	18.0 p	17.6 p	24.8 p	24.4 p	24.2 p	27.0 p
Fresh fruit & vegetable shipments										
Piggy back (thou. cwt.) 3/ 4/	545	570	602	591	668	920	927	727	514	511
Rail (thou. cwt.) 3/ 4/	786	640	516	379	447	690	678	335	183	471
Truck (thou. cwt.) 3/ 4/	7,923	8,006	8,173	7,553	9,143	11,219	10,328	8,945	7,848	6,096
Cost of operating trucks hauling produce 5/										
Owner operator (cts./mile)	114.2	115.5	116.1	116.3	112.7	113.0	112.3	111.8	111.8	111.8
Fleet operation (cts./mile)	112.7	115.3	116.7	117.4	113.3	113.4	112.6	112.1	112.1	112.2

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1985 and 1986. 5/ Office of Transportation, USDA. p = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1864.

Indicators of Farm Productivity

Table 37.—Indexes of farm production, input use, and productivity

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 2/
	1977=100									
Farm output	100	104	111	104	118	116	96	112	119	113
All livestock products 3/	100	101	104	108	109	107	109	107	110	111
Meat animals	100	100	103	107	106	101	104	101	101	100
Dairy products	100	99	101	105	108	110	114	110	117	118
Poultry & eggs	100	106	114	115	119	119	120	123	128	133
All crops 4/	100	102	113	101	117	117	88	111	116	108
Feed grains	100	103	116	97	121	122	67	116	133	122
Hay & forage	100	106	108	98	106	109	100	107	106	111
Food grains	100	93	108	121	144	138	117	129	121	106
Sugar crops	100	101	94	97	107	96	93	95	97	105
Cotton	100	76	102	79	109	85	55	91	93	69
Tobacco	100	106	80	93	108	104	75	90	79	62
Oil crops	100	105	129	99	114	121	91	106	117	110
Cropland used for crops	100	97	100	101	102	101	88	99	98	94
Crop production per acre	100	105	113	100	115	116	100	112	118	115
Farm input 5/	100	102	105	103	102	100	97	98	94	n.a.
Farm real estate	100	100	103	103	103	103	101	99	97	n.a.
Mechanical power & machinery	100	104	104	101	98	94	90	88	83	n.a.
Agricultural chemicals	100	107	123	123	129	118	105	121	123	n.a.
Feed, seed & livestock purchases	100	108	115	114	108	106	108	104	110	n.a.
Farm output per unit of input	100	101	105	101	116	116	98	115	127	n.a.
Output per hour of labor 6/										
Farm	100	97	106	109	132	140	106	123	135	n.a.
Nonfarm	100	101	99	99	100	99	103	104	104	n.a.

1/ For historical data and indexes, see Changes in Farm Production and Efficiency USDA Statistical Bulletin 657. 2/ Preliminary indexes for 1986 based on November 1986 Crop Production report and other releases of the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Bureau of Labor Statistics. n.a. = not available.

Information contact: Charles Cobb (202) 786-1803.

Table 38.--Supply and use of fertilizer

(See the June 1986 issue.)

Information contact: Paul Andrilenas (202) 786-1456.

Food Supply and Use

Table 39. Per capita food consumption indexes (1967 = 100)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Meat, poultry, & fish 2/	108.0	107.5	105.2	104.2	104.6	104.3	101.8	105.0	105.9	107.5
Meat	106.2	105.1	100.5	97.5	98.2	97.0	93.7	96.6	96.5	97.1
Poultry	115.2	118.4	124.3	134.6	134.6	138.3	141.5	144.3	148.8	153.6
Fish	118.4	118.6	125.1	121.7	118.9	120.5	114.2	122.1	127.4	134.8
Eggs	84.3	83.5	85.0	86.7	85.0	83.0	82.1	81.3	81.1	79.6
Dairy products 3/	103.6	103.1	103.7	103.3	102.7	103.0	105.3	107.7	109.8	111.4
Fats & oils 4/	108.0	105.0	108.0	110.9	112.0	112.2	113.1	117.3	115.4	125.3
Fruits	109.1	108.5	105.4	108.4	111.6	111.6	111.5	118.7	116.5	120.6
Fresh	104.5	104.2	104.8	107.2	113.6	112.6	112.5	118.1	121.6	122.2
Processed	89.1	88.9	79.4	82.1	80.4	81.6	80.1	82.3	81.9	84.2
Juice	153.1	150.8	146.2	151.1	152.0	153.4	155.1	176.0	151.4	170.1
Vegetables	111.6	109.1	110.7	111.5	111.7	109.7	112.6	114.0	119.3	5/
Fresh	109.9	112.1	111.0	115.2	116.1	114.8	120.7	119.9	128.5	130.0
Processed	113.7	105.7	110.4	107.2	106.6	103.7	103.0	107.1	108.5	5/
Potatoes/sweetpotatoes	113.4	116.3	116.9	110.3	104.0	107.9	113.4	110.0	112.5	118.7
Fresh	83.5	87.0	87.2	78.8	75.9	77.2	85.3	79.2	78.4	87.4
Processed	139.7	141.8	142.8	138.4	128.8	135.1	137.7	137.2	143.3	146.1
Beans, peas, & peanuts	99.6	96.1	88.1	105.3	88.1	95.3	105.7	108.1	102.6	103.9
Flour & cereal prod. 6/	104.0	103.1	100.9	106.0	105.4	105.9	108.8	105.2	105.4	110.0
Sugar & sweeteners	108.5	111.4	112.2	113.2	112.5	113.9	113.5	115.6	119.4	123.9
Coffee, tea, & cocoa	91.9	72.0	78.5	82.4	78.7	79.1	78.0	78.3	79.0	77.5
Total food	105.5	103.9	103.5	104.2	103.3	103.5	103.6	105.5	106.8	109.2
Animal products	103.5	103.1	101.9	101.3	101.5	101.1	99.9	102.8	104.0	105.5
Crop products	107.7	104.5	105.4	107.6	105.6	106.7	108.7	109.2	110.7	114.5

1/ Quantities of individual foods are combined in terms of 1977-79 retail prices. 2/ Includes edible offals. 3/ Excludes butter. 4/ Includes butter. 5/ Processed vegetable data are being revised and 1985 figures were not available in time for publication. 6/ Corn syrup and sweeteners are with sugars and other sweeteners.

Note: Historical food consumption indexes may be found in Food Consumption, Prices and Expenditures, 1964-84, Statistical Bulletin 736, ERS, USDA.

Information contact: Karen Bunch (202) 786-1870.

Table 40. Per capita consumption of major food commodities (retail weight)

	1977	1978	1979	1980	1981	1982	1983	1984	1985 2/
	Pounds								
Meats	152.3	146.9	144.8	147.7	145.2	139.3	144.1	143.7	144.4
Beef	91.8	87.2	78.0	76.5	77.2	77.2	78.7	78.6	79.2
Veal	3.2	2.4	1.7	1.5	1.6	1.6	1.7	1.8	1.8
Lamb and mutton	1.5	1.4	1.3	1.4	1.4	1.5	1.5	1.5	1.4
Pork	55.8	55.9	63.8	68.3	65.0	59.0	62.2	61.8	62.0
Fish (edible weight)	12.7	13.4	13.0	12.8	12.9	12.3	13.1	13.7	14.5
Canned	4.6	5.0	4.8	4.5	4.8	4.3	4.8	4.9	5.2
Fresh and frozen	7.7	8.1	7.8	8.0	7.8	7.7	8.0	8.5	9.0
Cured	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Poultry products	34.0	34.6	35.3	34.6	33.8	33.4	33.1	33.0	32.4
Eggs	44.1	46.7	50.6	50.1	51.7	53.1	53.9	55.7	57.4
Chicken (ready-to-cook)	9.1	9.2	9.9	10.5	10.7	10.8	11.2	11.4	11.9
Turkey (ready-to-cook)									
Dairy products	16.1	17.0	17.2	17.6	18.4	20.1	20.6	21.7	22.4
Cheese (excluding cottage)	4.3	4.2	4.1	3.8	4.1	4.1	3.9	3.8	3.7
Canned and bulk whole milk	259.7	257.1	253.0	249.5	245.3	244.5	242.3	243.3	245.1
Fluid milk and cream (prod. weight)	17.5	17.4	17.1	17.3	17.2	17.5	17.9	18.0	18.0
Ice cream (product weight)	53.1	54.7	56.1	57.0	57.5	58.4	59.6	58.8	64.0
Fats and Oils-Total fat content	4.3	4.4	4.5	4.5	4.3	4.6	4.9	4.9	4.9
Butter (actual weight)	11.4	11.2	11.2	11.3	11.2	11.1	10.4	10.4	10.7
Margarine (actual weight)	2.2	2.1	2.5	2.6	2.5	2.5	2.1	2.1	1.8
Lard	17.3	17.9	18.4	18.2	18.5	18.6	18.5	21.3	22.8
Shortening	21.0	22.1	22.5	22.7	23.2	23.4	25.1	21.5	25.1
Other edible fats and oils									
Fruits	79.4	80.5	81.2	86.7	83.9	85.7	88.0	87.5	88.2
Fresh	25.3	25.6	23.7	28.1	24.2	25.4	28.2	23.1	21.8
Citrus	54.2	55.0	57.5	58.6	59.7	60.4	59.8	64.4	66.4
Noncitrus									
Processed:	19.0	17.9	17.8	17.4	16.4	12.9	12.9	8.9	8.5
Canned fruit	13.6	16.5	16.9	16.7	19.1	13.7	16.2	n.a	n.a.
Canned juice	14.0	12.5	12.6	13.0	12.7	14.1	15.1	13.5	16.2
Frozen (including juices)	5.7	6.1	5.5	5.9	4.1	3.5	4.1	3.7	3.4
Chilled citrus juices	2.3	1.9	2.3	2.2	2.5	2.7	2.8	2.9	2.9
Dried 3/									
Vegetables	70.5	70.8	73.5	73.2	72.4	76.8	75.7	80.7	81.4
Fresh 4/	53.1	51.8	53.2	48.5	45.6	45.6	47.1	n.a.	n.a.
Canned (excluding potatoes)	10.2	10.7	11.2	10.4	11.6	10.7	11.1	12.0	n.a.
Frozen (excluding potatoes)	50.4	49.9	44.9	44.2	43.6	48.5	45.9	44.7	49.9
Fresh potatoes	15.7	17.2	17.7	16.9	18.2	18.1	18.8	20.8	21.2
Frozen potato products	5.1	5.5	5.2	4.3	5.3	5.7	4.6	5.1	5.6
Sweetpotatoes 5/									
Grains	115.5	115.2	117.2	116.9	115.8	119.4	115.9	117.6	122.5
Wheat flour 6/	7.5	5.7	9.4	9.4	11.0	11.8	9.8	8.5	9.3
Rice									
Other	6.9	7.9	8.5	7.7	7.7	7.6	7.6	7.5	7.4
Coffee	2.6	2.6	2.6	2.7	2.8	3.0	3.1	3.5	3.6
Cocoa	5.7	6.0	6.0	4.9	5.6	6.0	5.9	6.0	6.2
Peanuts (shelled)	5.4	5.6	6.6	5.8	6.8	6.4	4.4	6.1	n.a.
Dry edible beans	94.2	91.4	89.3	83.7	79.4	73.7	71.0	67.5	63.4
Sugar (refined)	39.8	43.3	47.2	52.7	58.8	63.8	69.4	77.3	87.5
Corn sweeteners 7/	33.1	35.4	36.8	37.8	38.8	39.5	41.1	44.2	45.6
Soft drinks (gallons)									

1/ Quantity in pounds, retail weight unless otherwise shown. Data on calendar year basis except for dried fruits, fresh citrus fruits, peanuts, dry beans, and rice which are on a crop-year basis. 2/ Preliminary. 3/ Series revised in 1986. Includes dates figs, prunes, and raisens. 4/ Commercial production for sale as fresh produce. Includes asparagus, broccoli, carrots, cauliflower, celery, corn, lettuce, onions, and tomatoes. 5/ Table stock and processed. 6/ White, whole wheat, semolina, and durum flour. 7/ Fructose and glucose. n.a. = not available.

Note: Historical consumption and supply-utilization data for food may be found in Food Consumption, Prices and Expenditures, 1964-84, Statistical Bulletin 736, ERS, USDA.

Information contact: Karen Bunch (202) 786-1870.

Order Direct and Save

*Check these **new**, reduced subscription rates now offered on a user fee, cost-recovery basis from USDA's Economic Research Service.*

AGRICULTURAL OUTLOOK. 11 issues annually averaging 52 pages. Subscribe from ERS for $26 domestic; $32.50 foreign. USDA's official outlet for farm income and food price forecasts. Data and discussion of issues ranging from international trade to prospects for commodity supply and demand, food marketing, agricultural policies, and other major issues affecting agriculture and the economy.

FARMLINE. 11 issues annually averaging 28 pages. Subscribe from ERS for $14 domestic; $17.50 foreign. Farm economic information in an easily read style, reinforced with charts and statistics for those without time to review all the technical reports from ERS. Reports on all economic topics important to those involved in agriculture, with the focus on the causes and implications.

NATIONAL FOOD REVIEW. Quarterly averaging 48 pages. Subscribe from ERS for $9.00 domestic; $11.25 foreign. The latest developments in food prices, product safety, nutrition programs, consumption patterns, marketing, and processing technology for those who manage, monitor, or depend on the Nation's food system.

How to Order

Check the box for each publication or insert the number of extra subscriptions you wish to order. Write one check or money order to cover total charges. You will receive a copy of the most current issue, and a letter acknowledging your subscription. *Do not send cash. No credit cards. Sorry, no refunds.* **Foreign customers note:** Only checks drawn on U.S. banks, cashier's checks, or international money orders accepted.

Publication	Domestic	Outside U.S.
Agricultural Outlook 11 issues	$26.00	$32.50
Farmline 11 issues	$14.00	$17.50
National Food Review Quarterly	$ 9.00	$11.25

Enclosed is my check or money order for $_____
Make check or money order payable to USDA/ERS and mail to: ERS Publications
USDA, Room 228
1301 New York Ave., N.W.
Washington, DC 20005-4788

For additional information, call (202) 786-1494.

Please print or type information below

NAME	DAYTIME PHONE NO. ( )		OFFICE USE ONLY
COMPANY OR ORGANIZATION			Date Rec'd
STREET ADDRESS OR POST OFFICE BOX NO.			Amount
CITY	STATE	ZIP CODE	Pubs Req'd First Issue Last Issue